INNOCENT PASSAGE AND FINANCIAL RESPONSIBILITY FOR OIL POLLUTION

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Innocent Passage and Financial Responsibility for Oil Pollution: An Appraisal Under International Law

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Subject to the provisions of these articles, ships of all States, whether coastal or not, shall enjoy the right of innocent passage through the territorial sea. . . . Foreign ships exercising the right of innocent passage shall comply with the laws and regulations enacted by the coastal State in conformity with these articles and other rules of international law . . .

--Convention on the Territorial Sea and Contiguous Zone, Article 14 paragraph 1, Article 17, 15 U.S.T. 1606, T.I.A.S. No. 5639, 516 U.N.T.S. 205.

Any vessel . . . using . . . the navigable waters of the United States for any purpose shall establish and maintain . . . evidence of financial responsibility of $100 per gross ton, or $14,000,000 whichever is the lesser, to meet the liability to the United States which such vessel could be subjected under this section /for costs of removal of oil discharged by such vessel./

--Federal Water Pollution Control Act, 33 U.S.C. § 477(p)(1), as amended by Water Quality Improvement Act of 1970, § 11(p)(1), Pub.L. No. 91-224, 84 Stat. 97.

COMPARATIVE CHARTS

1. DEFINITIONS OF INNOCENT PASSAGE

Article 3, 1930 Hague	Article 13 3, ILC	Article 14 4, Territorial Sea Convention
Passage is not innocent when a vessel makes use of the territorial sea of a Coastal State for the purpose of doing any act prejudicial	Passage is not innocent so long as a ship does not use the territorial sea committing any acts prejudicial	Passage is innocent so long as it is not prejudicial to the peace, good order or
to the security, to the public policy or to the fiscal interest of that State.	to the security of the coastal State, or contrary to the present rules, or to other rules of international law.	security of the coastal State. Such passage shall take place in conformity with these articles and with other rules of international law.

2. DUTIES OF A FOREIGN VESSEL DURING PASSAGE

Article 6, 1930 Hague	Article 18, ILC	Article 17, Territorial Sea Convention
Foreign vessels exercising the right of passage shall comply with the laws and regulations enacted	Foreign ships exercising the right of innocent passage shall comply with the laws and regulations enacted by the coastal State	Foreign ships exercising the right of innocent passage shall comply with the laws and regulations enacted by the coastal State
in conformity with international usage by the Coastal State	in conformity with the present rules and other rules of international law	in conformity with these articles and other rules of international law
and in particular, as regards	and, in particular with the laws and regulations relating to transport and navigation.	and, in particular, with such laws and regulations relating to transport and navigation.
(b) the protection of the waters of the Coastal State against pollution of any kind caused by vessels.		

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INTRODUCTION

The United States has enacted several specific oil pollution prevention statutes since 1924.[1] This legislation controls U.S. flag vessels in United States waters and on the high seas but makes claims to control foreign flag vessels only in U.S. internal waters and territorial seas. The most recent U.S. oil pollution legislation, the Water Quality Improvement Act of 1970 (WQIA),[2] for the first time in U.S. history requires evidence of financial responsibility of both U.S. and foreign vessels "using . . . the navigable waters of the United States for any purpose"[3] as a method of enforcing oil pollution prevention measures. International law has long recognized a right of innocent passage of foreign vessels through the territorial sea of a coastal state.[4] This claim by the U.S. over foreign vessels is a restriction upon passage of foreign vessels through the U.S. territorial sea and may be said[5] to conflict with or be in contravention of the international law obligation of the United States not to "hamper innocent passage through the territorial sea."[6]

Canada has enacted different legislation requiring financial responsibility for oil pollution damage which is applicable to foreign ships in both her territorial sea and

even in the high seas beyond her 12 mile limit.[7] Other states may well be encouraged by these examples to enact similar legislation which could contain significant differences in detail. Such claims can easily "develop into a jurisdiction barely distinguishable from that of full sovereignty."[8]

Such actions by states, if recognized, tend to reduce further the areas of competence of the international community in the oceans. These claims, though only one kind, are representative of the extensive challenge to and reconsideration of the fundamental order of the oceans which is currently underway.[9]

It is the task of this study to appraise these claims in the light of the existing law and current needs and trends. Such appraisal initially requires examination of the processes by which the oceans are used and abused by oil pollution. In addition, examination of the process of claim by which interests are asserted and the process of authoritative decision by which interests are honored or rejected is required. A clarification of goals is then suggested. The trends in decision of innocent passage and oil pollution prevention and control are examined for consistency with suggested goals and as an aid in subsequent evaluation of the reasonableness and concomitant acceptability of such claims to the international community.[10]

CHAPTER I

THE PROCESS OF INTERACTION

General Community Interests

The world community has a common interest in the oceans. Over 80% of the states of the world are either islands or have coastlines.[11] The oceans cover about 70% of the earth's surface.[12] The ocean floor contains the history of the changing life of the seas.[13] The oceans regulate the major physiological processes of all life on the planet earth.[14] The oceans are considered to be the joint or common property of all mankind, freely to be used and enjoyed by all, both as a source of wealth and food and as a means of international transportation and communication.[15]

Consequently all members of the world community have a common interest in keeping the ocean free of pollution of all kinds, particularly oil pollution. This commonality is shared by all participants in the world social and power processes: nation-states, international organizations, concerned national and transnational industries, concerned national and transnational private associations and individuals. Each shares a concern for the basic values of wealth and well-being which are affected by the pollution of the oceans.[16] This commonality of

interest exists both on the high seas and in the territorial sea because the effects of oil pollution can be devastating in either area of the oceans.

Exclusive Interests

The participants in specific situations have additional interests which may conflict with this generally held inclusive interest in the oceans. The nation-state and its interested groups desire to keep their beaches clean and their food supply alive and growing, and to be reimbursed for their losses caused by pollution. Support of these interests by coastal states commonly is manifested by unilateral assertions of authority in the areas of the ocean adjacent to their costs, typically in the territorial sea.[17] These assertions frequently are claims to an exclusive exercise of coastal competence to regulate activity in that area. However, other participants do not always share these interests.

The shipping interests (vessel owners, charterers, cargo owners and their respective insurers) are primarily concerned with keeping the vessels moving with their cargoes as efficiently and as cheaply as possible. Cargo ships do not earn money when they sit in port, whether the cargo is oil or dry goods. The cargo does not sell for a profit unless it is moved. Consequently the shipping interests

find it against their direct economic interests when coastal states impose restrictions on their ships through construction requirements, limits on free entry into or through territorial seas, internal waters or ports, or by unloading restrictions.

The owners of private property all have exclusive interests in protection of their own property. Coastal property is desired to be protected from damage while seaborne cargo is desired to be moved and sold.

As is suggested by this brief specification of interests, each interested group has definite conflicting interests, both inclusive and exclusive.

Oil Pollution in the Oceans

Oil pollution has in the past few years begun to receive extensive and broad ranging examination[18] into the nature, causes, amounts, sources, prevention, control and legal regulation of, and harm caused by, oil spilled into the world's oceans. Unfortunately little is yet authoritative in few of these various aspects of oil pollution.

Relatively little is known about the effects of oil on marine life since present results are conflicting: different kinds of damage have been observed for different spills of different kinds of petroleum.[19] The potential

effects, however, are extensive:

> direct kill of organisms through coating, asphyxiation, or contact poisoning; direct kill through exposure to the water-soluble toxic components of oil; destruction of the food sources of organisms; incorporation of sublethal amounts of oil and oil products into organisms, resulting in reduced resistance to infection and other stresses or in reproductive failures.[20]

The effects of oil pollution on man are the easily observed and perhaps better documented effects associated with the fouling of recreational beaches, private vessels, piers, harbors, fishing gear, waterfront property, marshes, estuaries and birdlife.[21]

Oil spills occur mainly during the course of transportation of the various types of crude oil or finished petroleum products. The precise sources, amounts and causes of such spills are not known.[22] The yearly total amount of oil spilled from ships into the oceans appears to be in the magnitude of one million metric tons[23] while oil introduced into the oceans from all other sources is said to be of the same order of magnitude.[24] Oil spills from ships are known to occur either by accidents (collisions, groundings, strandings and mishaps during loading, transfer or unloading of oil)[25] or by intentional discharges (from bilges, ballast water, or tank cleanings).[26] Of the perhaps 10,000 oil spills each year,[27] it appears that accidents account for only about 10% of the oil put into the oceans each year.[28] Evidence of oil spills have been

found over vast reaches of the oceans.[29] The behavior of each oil spill varies with the type of oil involved, the location of the spill, the climatic conditions of the spill area, and the amount of oil spilled. Definitive research into these very large variables has not been conducted. The most relevant fact known is that the heavier petroleum fractions, including crude oil, last longer and therefore require physical removal.[30]

The legal regulation, precaution and control of oil spills are discussed in pertinent later parts of this study.

Petroleum Transportation by Sea

Oil is moved by sea simply because it is the cheapest way to move the product in demand from its sources to its distant places of consumption. This need for transportation arises from the normal situation that the amount of production and consumption of oil throughout the world is not the same in any geographical area.[31] The movement of oil by tanker has expanded rapidly to the point in 1969 that sixty percent, amounting to one billion metric tons, of the world's annual oil production was transported by sea.[32]

This vast quantity of crude oil is carried today in about 3500 tankers over 6000 deadweight tons (dwt), about one-third of which are over 50,000 dwt but which account for

about 60% of the world's tanker fleet deadweight tonage.[33] As recently as 1969 only about one-quarter of the then almost 4,000 tankers over 2,000 gross tons were larger than 50,000 dwt.[34] Costs per ton-mile are significantly reduced with the use of larger tankers.[35] That this is a recent accomplishment is also evidenced by the fact that all tankers over 140,000 dwt ever built have been constructed since 1966.[36] At the time that this study was written the largest tankers at work were the six Liberian-registered Gulf Oil-subsidiary owned Universe tankers of the 326,000 dwt class.[37] However, the Japanese Nisseki Maru of 372,000 dwt has been launched[38] and a 477,000 dwt tanker, to begin construction in February 1972,[39] is expected to be the world's largest tanker when placed in service in 1973.[40] The workhorse of the biggest tankers apparently is going to remain in the 250,000 dwt class[41] since there are already about two dozen of them at work,[42] Gulf Oil Corporation and Standard Oil Company (New Jersey) have about that many more themselves planned or under construction at the present time[43] and 85% of the ships on order or under construction at the beginning of 1971 were over 200,000 dwt.[44]

In addition the draft of the large tankers poses severe limitations on transit and port usages. There are only 20 ports in the world that can accomodate the almost 60 foot draft of the 200,000 ton class tanker[45] and the three in the United States (Seattle, Wash., Long Beach,

about 60% of the world's tanker fleet deadweight tonage.[33] As recently as 1969 only about one-quarter of the then almost 4,000 tankers over 2,000 gross tons were larger than 50,000 dwt.[34] Costs per ton-mile are significantly reduced with the use of larger tankers.[35] That this is a recent accomplishment is also evidenced by the fact that all tankers over 140,000 dwt ever built have been constructed since 1966.[36] At the time that this study was written the largest tankers at work were the six Liberian-registered Gulf Oil-subsidiary owned Universe tankers of the 326,000 dwt class.[37] However, the Japanese Nisseki Maru of 372,000 dwt has been launched[38] and a 477,000 dwt tanker, to begin construction in February 1972,[39] is expected to be the world's largest tanker when placed in service in 1973.[40] The workhorse of the biggest tankers apparently is going to remain in the 250,000 dwt class[41] since there are already about two dozen of them at work,[42] Gulf Oil Corporation and Standard Oil Company (New Jersey) have about that many more themselves planned or under construction at the present time[43] and 85% of the ships on order or under construction at the beginning of 1971 were over 200,000 dwt.[44]

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Calif., and Machiasport, Maine) do not have proper commercial berths for them.[46] Indeed, no port in the East coast, except for Maine, can dock a tanker of over 80,000 dwt.[47] Relatively shallow and restrictive of passage also are such areas as the North Sea and the English Channel, such straits as Dover, Singapore and Malacca and the Panama and Suez Canals.[48] The maneuverability limitations on these "very large cargo carriers" (over 200,000 dwt) is of considerable concern.[49]

There does not appear to be any concrete information as to the exact routes which the world's tankers take in the movement of this oil. Indeed over the past decade the heaviest flow of oil has changed routes drastically both with new discoveries of deposits, changes and increase in demands for consumption, and in closing of certain shipping routes due to conflict (the Suez Canal being the prime example). However, examination of the maps reproduced in Appendix A show that the current heaviest flow of crude oil moves from (1) the Persian Gulf states of Iraq, Iran, Kuwait, Saudia Arabia and the Trucial States either around the Cape of Good Hope off South Africa and then to Europe or through the straits of Malacca and Singapore between Malaysia and Sumatra, Indonesia to Japan; (2) from northern Africa states of Libya and Algeria across the Mediterranean to western Europe; or (3) from Venezuela through the Carribean to the United States and Canada. In much smaller

quantities (1) Middle Eastern Oil may also be seen as supplying on the eastern route the countries on the Bay of Bengal, Australia and the western U.S., and on the western route, southern Africa, Argentina and the eastern U.S.; (2) northern Africa supplies some oil to the northeastern North American coast; (3) Nigerian oil on the west coast of Africa supplies Brazil, the eastern U.S. and Canada; (4) Venezuelan oil supplies some oil to northern Europe; and (5) Indonesia and Equador supply some oil to the west coast of North America.[50] Unfortunately these maps do not show the proximity of the tanker routes to nations' coasts. However, one knows that ships for economic reasons will take the shortest routes available. Thus the major tanker traffic is most likely to be in closest proximity to the coastlines of the following countries which are not major recipients of the cargoes of crude oil except by oil spillage:[51]

1. South African route:

   Somali Republic, Mozambique, South Africa, Sierra Leone, Guinea, Portugese Guinea, Senegal, Gambia, Mauritania, Spanish Sahara and Morocco.

2. Persian Gulf-Japan route:

   India, Ceylon, Malaysia, Indonesia, Taiwan and Philippines.

3. Venezuela-United States route:

   Dominican Republic, Haiti, Cuba, Jamaica and the Bahamas.

If the routes necessary to carry the minor flow are considered,

then few coastal states except perhaps Chile and Peru are currently not exposed to the dangers of oil pollution of their beaches and territorial seas.

CHAPTER II

THE CLAIMS PROCESS

Claimants

Many interwoven factors are involved in both a claim of a right to innocent passage and a claim to prohibit or otherwise restrict passage through territorial seas unless a ship has previously established her financial capability to pay the cleanup costs of any oil pollution she may cause while passing the coast of a state. Clarification and appraisal of the conflict can be facilitated by identifying who participates in the process of claim what participants are affected and who they are, what interests of theirs are affected, and what are their objectives, claims and counterclaims.

Evidently many diverse groups are affected by oil pollution of the oceans and this particular method of combatting the problem.[52] The principle visible claimants are those representing the ships which are perceived as the cause of the oil pollution and those attempting to take steps to protect and recover from the effects of oil pollution. In particular, nations with large merchant fleets generally are opposed against the coastal states who feel threatened by the dangers of oil pollution of their coasts.

But flag nations include both those nations with ships belonging to their nationals sailing under their flag or under a flag of convenience and also those nations which are by their laws providing the flags of convenience for nationals of other nations.

The flag nations may also be observed to include both developed countries such as the United States, the United Kingdom or the USSR, and a few developing nations -- flag of convenience nations of Panama, Liberia and Hondouras.[53] Some flag nations may also be states with large maritime commercial interests either in import and/or export and/or distant-water and/or coastal fishing, e.g. the U.S., USSR and Japan.[54]

The coastal nations similarly are not uniform in the interests they individually represent. Some coastal states have small merchant fleets, short coastlines not exposed to major shipping lanes and a small maritime trade. Other coastal nations may be strong in all three areas, like the United States. Other coastal nations may be strong in only one or two of the areas, e.g. Canada and South Africa which do not have large maritime fleets but do have substantial coastlines parallel to major shipping lanes and a substantial or significant maritime trade.[55]

The variations could be expanded. The grouping is primarily intended to show that the various nations making claims in this particular subject area generally have

competing interests at home bearing on which claim they espouse and on the position they take as decision-makers in appraising these competing claims.

One should also not forget the international and private claimants whose views are also reflected in the various claims. These would include the United Nations and its specialized agencies, and such private organizations as insurance companies, environmentalists, fishermen (commercial and sport), oil companies, shipping organizations, domestic state and local governments and private individuals.

It should be noted that these claimants make their claims in both organized and unorganized arenas. The organized arena is generally limited to the United Nations, meetings of its specialized agencies and conferences for specific problems. All the other claims are generally made in the unorganized arenas of normal diplomatic and private negotiations.

For simplicity and clarity in discussing the claims it would be helpful to narrow the number of these claimants. It appears that the interests of these groups are sufficiently represented by the coastal states and the flag nations that further analysis can be restricted to a focus on these two except where a greater detail will be helpful.

Objectives

Coastal States

A claim by a state to prohibit passage through its territorial sea unless as a prerequisite financial responsibility for oil pollution cleanup has been established may be seen to be primarily designed to protect and enhance its own well-being and wealth position. Claims to require such financial responsibility are made as part of an overall scheme designed at pollution prevention and control. Elsewhere described are the current efforts at preventing oil spills from occurring in the first place, developing appropriate actions to detect and mitigate the effects of an oil spill which has occurred and to assess the costs of cleanup operations to those responsible for the pollution.[56] Obviously the claim under study here falls within the last category just mentioned.

The U.S. claim under the WQIA is to require that funds be available to repay the U.S. government for its costs in cleaning up a particular oil spill. That claim is then directly related to maintaining the government's wealth position. However, to the extent that the costs of maintaining this financial responsibility encourages safer and more careful practices and techniques regarding the handling and transportation of oil, then the claim tends to enhance the well-being of all citizens of the

United States through ultimate protection of the nation's coastlines, the living resources of the sea (including the coastal margin and the deep sea), and the property interests of individual citizens.

One should note that if the effect of the claim is to reduce the pollution of the seas by oil then the coastal state's nationals are not the only beneficiaries. A reduction in pollution of the oceans by oil redounds to the other states' benefit through the preservation and enhancement of common resources of the ocean space including migratory fishes and birds. This then is a common interest of all states.

As previously suggested, a coastal state must recognize that its claim unilaterally to require financial responsibility for all ships passing through its territorial sea will encourage other similar claims by other coastal nations. One can expect from previous experience in similar areas of a multitude of unilateral claims that the coastal states will not impose uniform regulations so that the ships will be faced with a host of differing or even conflicting regulations all designed to accomplish the same purpose. Such a situation seems appropriate for international multilateral solution.

It should be recognized that such claims can also adversely affect a coastal state making such a claim which,

like the U.S., has a maritime fleet of its own engaged in international trade.

Solution to these conflicts will then in part turn on how a state's long-term and short-term objectives are viewed. Domestic resolution of such conflict will tend to minimize that internal conflict; international resolution of the conflict will minimize the international conflict. The short-term objective of minimizing the effects of oil pollution must be made compatible with the long-term objectives of international peace and cooperation.

One may suggest that the conflict can be resolved unilaterally by the coastal state not attempting to impose the claim on the vessel engaged in innocent passage, or by limiting the sanctions or by imposing no sanctions at all. The conflict may be resolved multilaterally by seeking ways to minimize the pollution threat including arrangements providing financial responsibility available to all states and their nationals.

Not to be forgotten in an examination of objectives is a coastal state's secondary -- or latent -- military security desires which find themselves in conflict: between the desire for secure coastlines and the desire for free and secure navigation of the oceans by its navy. Other secondary objectives that a coastal state may have in making these claims are prevention and control of oil spills and the state's interests in international trade and commerce

and in economic development of its own country.

Flag States

The flag states, and the other interests they represent, seek primarily to secure protection for the process of interaction by which the oceans are enjoyed. In particular they seek to keep their ships moving with a minimum of unnecessary interference. Thus they seek to minimize interference with navigation, maximize profits both for the shipping and related industries and for the flag nation itself, both consistent with whatever other competing obligations may be imposed upon them.

Some flag states also may be seen to seek protection of the concept of national sovereignty implicit in the flag state concept.

All of these objectives, in the context under study, appear in their objection to unilateral requirements for financial responsibility.

Claims and Counterclaims in General

Perspective will be assisted by stating in a more general way the conflicting claims that can appear before the content of the specific coastal claims will be detailed.

Coastal Claim to Control Passage in the Territorial Sea

As stated elsewhere[57] there are many categories of claims by a coastal state to authority over its territorial sea. Coastal state claims to authority regarding pollution control in its territorial sea can run the gamut of these categories. In the name of prevention, detection, cleanup and punishment, claims to authority can be listed as follows:

1. claims relating to control over access, either

a. claims to comprehensive, continuing authority to deny all passage through the territorial sea, e.g. to deny the right of passage to all supertankers through the territorial sea, or

b. claims to an occasional exclusive competence to deny passage for specified cause, e.g. to deny entry into the territorial sea until proof of financial responsibility for oil pollution cleanup costs is made to the coastal state;

2. claims to apply authority to vessels, e.g. assertions of "judicial jurisdiction" in admiralty for cleanup costs caused by oil pollution from a passing ship;

3. claims to apply policy for events in the territorial sea, e.g. assertions of authority to establish navigation routes or procedures, use of communication equipment, sanitation and waste disposal procedures from tankers, and

4. claims to prescribe and apply policy to events aboard vessels, e.g. criminal arrest of persons aboard a polluting vessel for violation of coastal law against pollution by ships.

Flag State Counterclaim to Innocent Passage

In general terms a counterclaim of innocent passage can be made in specific opposition to each of the categories of coastal state claims set forth above. In general, a vessel claims it has a right to make a particular use of the territorial sea because it is engaged in innocent passage. In specific terms the flag nation's responses would be generally as follows, corresponding to the order given above:[58]

1. International law does not authorize the coastal state claim to control over/access to the territorial sea either on a comprehensive, continuing basis or on an occasional exclusive basis. And in addition all vessels are entitled to use the territorial sea regardless of the use of purpose.

2. Coastal state claims to apply authority to a vessel is an unreasonably grave obstruction to efficient use of the oceans.

3. The flag vessel questions the coastal state's competence to require conformity to a particular coastal

state policy as a condition of entry.

4. Innocent passage is unreasonably affected by coastal state exercise of authority to prescribe and apply policy to events aboard the vessels of another nation.

Although these responses are stated in very general terms, it is evident that they are in reality little more than the "'tis -- 'tain't" type of childish argument which does not deal with the issues but merely has each side claiming it is right and the other side is wrong. A counterclaim to innocent passage is simply not an answer in itself. Neither "innocent" nor "passage" have a meaning which is clear and unambiguous standing alone. In other words, "innocent passage is but another, semantically equivalent, way of talking about the scope of coastal authority over access to the territorial sea."[59] Accordingly only the coastal state assertion of authority will be treated in detail as a claim. The counterclaim of innocent passage will be treated below in a survey of the trends in decision since authoritative recognition of innocent passage has been by the decision-makers. Indeed much of the international law which has developed in the past 40 years has been in an effort to put content and meaning into the two words "innocent passage". As will be later seen from the description of those efforts they have met with little success.

United States Claims in General

The United States apparently first began regulating water pollution by statute, in 1886 regarding New York Harbor,[60] and culminating[61] in the River and Harbor Act of 1899[62] of general application. However the first comprehensive U.S. legislation dealing with oil pollution specifically was not enacted until 1924. The Oil Pollution Act of 1924[63] prohibited generally discharges of oil into the navigable waters of the United States with more misdemeanor penalties. It contained no cleanup requirements or financial responsibility provisions.

After ratification of the 1954 Oil Pollution Prevention Convention in 1961,[64] the U.S. adopted implementing legislation.[65] The Oil Pollution Act of 1961 prohibited American flag ships from discharging oil into waters of the prohibited areas but lacked adequate enforcement provisions. Again, after ratification of the 1962 amendments to the 1954 Oil Pollution Prevention Convention,[66] the U.S. enacted implementing legislation amending the 1961 Oil Pollution Act.[67] These amendments also lacked enforcement provisions.

Subsequently the 1966 Clear Waters Act amended the 1924 Oil Pollution Act but reduced its effectiveness and applicability to only intentional discharges.[68] This emasculation was removed by the WQIA.[69]

The WQIA is the most comprehensive U.S. oil pollution legislation enacted to date. It was however, not enacted until after, and in direct response to, the massive oil pollution of San Juan Harbor and the Santa Barbara channel.[70] The WQIA prohibits all discharges of oil in U.S. waters with exceptions as contained in the 1954 Oil Pollution Prevention Convention in the contiguous zone and those permitted by Presidential exception.[71] The WQIA requires notice to be given of any and all oil spills,[72] imposes requirements to clean up spills,[73] imposes liability with limitations for U.S. cleanup costs,[74] and permits the U.S. to clean up if the owner of the polluting vessel does not.[75] Enforcement provisions also include civil and criminal penalties for violations,[76] authorization to board and inspect vessels, arrest violators and execute court process,[77] requirements of vessel owners to establish financial responsibility to meet liability to the U.S. for clean up costs.[78] The WQIA, however, does not provide any sanctions for violation of the financial responsibility requirements.[79] The act also leaves all other persons damaged by oil pollution to their existing remedies (if any)[80] and exempts public vessels.[81]

With this context of the claims and counterclaims generally states, attention is next turned to examination of the details of these claims in an attempt to specify

exactly the nature, sources and legal foundations of these various coastal state claims.

Claims to Require Financial Responsibility for Oil Pollution

United States Claim: What Does "For Any Purpose" Mean?

Introduction

Section 11(p)(1) of the Water Quality Improvement Act of 1970 requires "any vessel . . . using . . . the navigable waters of the United States for any purpose shall establish and maintain . . . evidence of financial responsibility . . . to the United States . . ." (emphasis added.) Such in brief is the statutory claim of the United States. Since the navigable waters of the United States are defined in the Federal Maritime Commission (FMC) implementing regulations to include "the coastal territorial waters of the United States" as well as "the inland waters of the United States" and the Panama Canal,[82] it is most necessary to determine if this language is intended to apply to non-U.S. flag vessels traversing U.S. territorial seas in innocent passage. Only if it is so found, does one then have to determine the meaning of innocent passage and if they are in conflict.

It appears that attempts in the United States to require financial responsibility for oil pollution clean

up costs were not made before 1968.[83] Accordingly we now turn to the U. S. legislative efforts of 1968.

U.S. Legislative Efforts in 1968

A Bill is Introduced: H.R. 15992

Apparently the first bill containing a provision requiring proof of financial responsibility to meet liability for possible oil pollution was introduced early in the second session of the 90th Congress, eleven days after the S.S. Ocean Eagle went aground in San Juan Harbor. On March 14, 1968 Congressman Rogers introduced H.R. 15992 which was referred to the House Merchant Marine and Fisheries Committee. This bill was specifically designed to require proof of financial responsibility. It provided:

> (a) each owner or charterer of an American or foreign vessel carrying oil, petroleum products, or their contaminants on the high seas or the navigable waters of the United States and using any port of the United States shall establish, under regulations . . . his financial responsibility to meet any liability he may incur for death or injury and damages resulting from any spillage or other release, however caused, of oil, petroleum products, or other contaminants into the high seas or navigable waters of the United States on voyages to or from United States ports. . . . (emphasis added).[84]

This proposal contains a claim over foreign vessels but appears to be limited to those"on voyages to or from United States ports." One may call this a limited claim to distinguish it from the more comprehensive claim under

examination. Perhaps because this bill was not part of a total package to control oil pollution no hearings were held on the bill. It died in committee at the end of the 90th Congress.[85]

Hearings on a Different Bill

The Initial Suggestion: Mr. Everett S. Checket

Research reveals the first Congressional testimony regarding financial responsibility to meet liability for oil pollution occurred on April 24, 1968. Mr. Everett S. Checket made the suggestion in testimony before the Subcommittee on Rivers and Harbors of the House Public Works Committee, 90th Congress, second session.[87] Mr. Checket testified as a member of the American Petroleum Institute's General Committee, Division of Transportation,[88] in support of the identical bills H.R. 14000 and S. 2760, a provision for financial responsibility of vessels or their owners to meet liability for oil pollution. Mr. Checket suggested to the subcommittee an amendment to section 19 of these bills which dealt with oil pollution.

He testified:

> This section [sec. 19, S. 2760 and H.R. 14000] as written, does not, in our view, accomplish the basic objective we all hope to achieve -- namely the establishment of an effective legal and monetary program for recovery of the costs of removing an oil spill. We can forsee a variety of circumstances under which it would be impossible for the Secretary of the Interior to recover the costs of oil removal from the party who caused the spill.

> Then, too, a foreign shipowner causing pollution might not be accessible to the secretary for collection of costs resulting from pollution. In this last example, bear in mind that we are speaking of all categories of ships -- freighters, tankers, bulk cargo, and so on -- which in international commerce constantly travel in and out of U.S. waters, and along with U.S.-flag vessels are potential sources of pollution.
>
> The public interest will not be fully protected unless legislation pertaining to an obligation to remove an oil spill also provices a constant and reliable guarantee of an availability of funds -- in other words, what we call financial capability. The bill ignores this fundamental condition and therefore might give to the Secretary of the Interior a meaningless right to recover his costs in removing a spill.
>
> We urge that this pivotal concept of financial capability be incorporated in this bill. We would suggest incorporating a provision that: (1) Any vessel registered, enrolled, or documented under the laws of the United States or (2) Any foreign vessel entering a port of the United States must demonstrate its financial capability. Evidence of financial capability can take many forms which the legislation should recognize. (Emphasis added.)[90]

For the current purposes one must first note the limited nature of Mr. Checket's proposal. He suggests a claim over foreign vessels only if they enter U.S. ports. We will soon see that this suggestion was quickly picked up by the Congressmen involved and promptly made into a general claim over all foreign vessels in U.S. navigable waters.[91] We will also see that later testimony before the cognizant committees pointed out the innocent passage

counterclaim and that all the committee reports and floor debates ignored the problem.

Congressional Response

To return to Mr. Checket's appearance before the House subcommittee on Rivers and Harbors on April 24, 1968. His suggestion was immediately picked up by the chairman, Representative John A. Blatnik:

> . . . At the outset, the suggestion, recommendation of an insurance type guarantee provision to insure financial capability to protect those who are injured by an oil spill as such is an intriguing one. It is the first time that it has been offered or presented before this committee in the presence of the chairman and it seems to make sense. . . .[92]

Another member of the subcommittee also liked the idea. Congressman Jim Wright stated:

> I am intrigued by the possibilities of this creative suggestion you have brought to us. It is quite comprehensive it seems to me and is an entirely new and heretofore somewhat unexplored possibility. I think it has obvious merit. . . . (Emphasis added.)[93]

. . . .

> With respect to your suggestion, the first suggestion that we require a showing of financial responsibility on the part of anybody who might have a capability to pollute waters by oil spills, it seems to me that the key suggestion contained in that program is the requirement of insurance liability. . . . (Emphasis added.)[94]

These quotations illustrate how Congressman Wright immediately ignored the limited thrust of Mr. Checket's suggestion

to foreign vessels entering U.S. ports and how Mr. Wright subsumed both U.S. and foreign vessels into the suggestion regarding all U.S. vessels which was not limited as to location. One may presume that in this matter the claim over foreign vessels came to be so broad.

"Public Reaction"

Mr. Checket's suggestion regarding financial capability was otherwise noted in only one statement to the subcommittee. The Maritime Law Association of the United States after the hearings closed opposed this suggestion in a letter from its Special Committee re H.R. 14000 to the subcommittee dated May 28, 1968. This letter stated in relevant part:

> API has proposed that shipowners be required to produce proof of financial capability to pay the severe financial burdens proposed under the bill. The MLA urges that such a provisions not be enacted into the law. Such a requirements is not a workable way to cope with the problems at hand, unless it is done on the basis of an international convention. If required unilaterally by our government, not only from U.S. flag vessel owners but owners of foreign flag vessels trading into our ports, retalitory measures could well be expected to be taken by other nations. . . . (Emphasis added.)[95]

It is apparent that the MLA has read Mr. Checket's testimony closely. They noted the limited nature of his proposal but opposed it on financial grounds of reciprocity. The international convention then under development was signed 18 months[96] later, four months before Congress passed the

WQIA with a broadly stated claim for financial responsibility of foreign vessels.

Committee Action and Conference Death

The House Public Works Committee never reported out H.R. 14000 or S. 2760. However, parts of those bills were thereafter inserted in another Senate-passed bill which subsequently came before that House Committee. That was S. 3206 which, as passed by the Senate after the House hearings on H.R. 14000 were long completed, did not contain any provision regarding financial responsibility to meet liability for oil pollution.[97]

As reported out by House Public Works Committee on October 3, 1968, S. 3206 contained amendments including a new section on oil pollution.[98] Apparently S. 3206 was thereby the first bill reported out by a Congressional committee to contain a provision regarding financial responsibility to meet liability for oil pollution. In relevant part it provided:

> Sec 19(m) The Secretary of Transportation, in consultation with . . . shall conduct a study of the need for and to the extent determined necessary, measures to provide financial responsibility and limitations of liability with respect to vessels using the navigable waters of the United States for the cost of moving discharged oil and paying all damages resulting from the discharge of such oil. . . . (Emphasis added.)[99]

The report of the House Public Works Committee on

this bill does not shed much light on the source or meaning of this provision. The summary "Bill at a Glance" section of the report merely states that this subsection ". . . would direct the Secretary of Transportation to carry out a 15-month study of the need for and measures to provide financial responsibility and limitations on liability with respect to vessels using U.S. waterways and to report to Congress by January 1, 1970." (Emphasis added.)[100] The "Section-by-Section" explanation says little more:

> Sec 19(m) would direct the Secretary of Transportation, in consultation with . . . to conduct a comprehensive study of the need for and measures to provide financial responsibility and limitations of liability with respect to vessels using U.S. waterways for the cost of removing discharged oil and paying all damages that may result from such discharges. . . . (Emphasis added.)[101]

One cannot determine from these provisions if foreign vessels in innocent passage were intended to be included. The ambiguous language here used is consistent with the indiscriminate use of words by Congressman Blatnik and Wright quoted on page 28. The lack of clarity may also be explained by the purpose of the provision as worded: it is to be a study of the whole problem of financial responsibility, of which innocent passage is but a small part.

At this point in time the 90th Congress was scheduled to adjourn sine die on October 11.[102] The bill was thus brought to the House floor on October 7, 1968, under suspension of the rules, thereby limiting debate, prohibiting

floor amendments and requiring a two-thirds vote for passage.[103] The debate on the bill did not touch on the question of innocent passage and financial responsibility. The bill passed the House unanimously (277-0) on October 7 in a form rather different from that passed three months earlier by the Senate.[104]

The managers of the bill then tried to get the Senate to accept the House version rather than try to seek a conference. However, Senator Muskie would not agree to the complete House version.[105] Thus on October 11 the Senate voted to agree to part but not all of the House version of S. 3206.[106] Adjournment was thereupon delayed until Monday October 14 since both Houses wanted to avoid responsibility for failure to pass the water pollution legislation.[107] The House met on the fourteenth, agreed to a series of technical amendments made by the Senate on the preceding Friday but voted to disagree on other portions of the Senate-passed bill.[108] For failure of action by the Senate on this action by the House, S. 3206 died.[109]

During all these debates and votes both Houses did not disagree over the provisions of Section 19(m). It was apparently never at issue between them and in fact passed the House twice and the Senate once during that week.

No study of the financial responsibility problem was to be undertaken at Congressional direction yet. It remained for the 91st Congress to take up and finally legislate

regarding financial responsibility to meet liability for oil pollution. During this time other people and groups were evidently studying this problem and interacted during 1969 both on Capitol Hill and in the international scene.

U. S. Legislative Achievements in 1969

Bills Introduced

As the 91st Congress began in mid-January 1969, many oil pollution prevention and control bills were introduced in both Houses of Congress. The matter of financial responsibility was included in some of them.

Senate Bills Calling for Study

On the Senate side two bills were introduced which contained similar provisions calling for a study of the financial responsibility problem.

S. 7

The first bill was S. 7, a bill to amend the Federal Water Pollution Control Act, which Senator Edmund S. Muskie introduced on January 15th.[110] Section 12(j) of that bill as introduced provided:

> The Secretary of Transportation, in consultation with . . . shall conduct a study of the need for, and the desirability of, establishing a system of requiring vessels using the navigable waters of the United States to give evidence that such vessels have adequate

> financial capability within appropriate limitations to reimburse the United States in accordance with the provisions of subsection (c) of this section for the removal of discharged oil and to pay damage claims covering private real or personal property injured or destroyed by such discharged oil. . . . (Emphasis added.)[111]

One notes that the proposed claim over vessels is unclear as to its scope. It could easily include foreign vessels in innocent passage through the U.S. territorial sea. One might also point out that this section uses Mr. Checket's word "capability" rather than "responsibility" as used in section 19(m) of S. 3206 which both Houses agreed upon at the end of the 90th Congress.[112] Apparently the Senate Public Works Committee staff has read the House Public Works Committee hearings! Perhaps somewhat more significant is the greater specification in S. 7 of the possible claims of the U.S. government for clean up costs and of other claims for damages caused by oil pollution. Section 19(m), S. 3206, 90th Congress had not specified any particular class of claimants. This then is notable since the first bill on this subject reported out of committee treated separately U.S. governmental clean up costs and other damages.[113]

S. 544

A week later, on January 22, 1969, Senator Muskie introduced the other Senate bill containing language

regarding financial responsibility, S. 544. This bill had been prepared by the Department of Interior and was introduced at their request.[114] Section 12(i) of Section 3 of S. 544 as introduced provided:

> The Secretary of Transportation, in consultation with . . . shall conduct a study of the need for, and the desirability of, establishing a system of requiring vessels using the navigable waters of the United States and the waters of the contiguous zone to give evidence that such vessel have adequate financial capability within appropriate limitations to reimburse the United States in accordance with the provisions of this section for the removal of discharged oil and to pay damage claims covering private, real, or personal property damaged or destroyed by such discharged oil. . . . (Emphasis added.)[115]

It may be seen that this section differs from section 12(j) of S. 7 only in that it looks to impose the financial responsibility requirements on vessels in the contiguous zone as well as in U.S. navigable waters. This particular claim was in the contiguous zone was not adopted. No explanation appears in the legislative history as to why it was dropped.

House Bills

Financial responsibility appeared in different forms in the House bills H.R. 4148, H.R. 5511, H.R. 6495, H.R. 6609 and H.R. 7361, 91st Congress.

Calling for a Study of Financial Responsibility

H.R. 4148

H.R. 4148, a bill to amend the Federal Water Pollution Control Act, was introduced by Representative George H. Fallon, by request, on January 23, 1969 and was referred to the House Public Works Committee of which Congressman Fallon was then chairman.[116] This bill provided in relevant parts:

> Sec 12(i) The Secretary of Transportation, in consultation with . . . shall conduct a study of the need for, and the desirability of, establishing a system of requiring vessels using the navigable waters of the United States and the waters of the contiguous zone to give evidence that such vessels have adequate financial capability within appropriate limitations to reimburse the United States in accordance with the provisions of this section for the removal of discharged oil and to pay damage claims covering private, real, or personal property damaged or destroyed by such discharged oil. . . . (Emphasis added.)[117]

Since this subsection is identical to that of S. 544 just quoted, it would appear that this bill was also introduced at Interior's request.[118]

H.R. 5511

Before another bill on this subject was introduced in Congress, the infamous Santa Barbara Channel oil blowout began on January 28, 1969.[119]

The oil leaked at the rate of 20,000 gallons a day for several weeks, polluting beaches along 20 miles of the California shore, and the story occupied the front pages of newspapers across the nation for several weeks.[120]

Two days after the blowout began Congressman Dingell introduced H.R. 5511, another bill to amend the Federal Water Pollution Control Act. Perhaps because the Santa Barbara spill involved offshore drilling and not a tanker spill, H.R. 5511 contained identical language to that contained in S. 7:

> Sec 12(j) The Secretary of Transportation, in consultation with . . . shall conduct a study of the need for, and the desirability of, establishing a system of requiring vessels using the navigable waters of the United States to give evidence that such vessels have adequate financial capability within appropriate limitations to reimburse the United States in accordance with the provisions of subsection (c) of this section for the removal of discharged oil and to pay damage claims covering private real or personal property injured or destroyed by such discharged oil. . . .[121]

Accordingly both Public Works Committees had before them the same to proposals for studies of financial responsibility.[122]

Requiring Financial Responsibility

Referred to Merchant Marine Committee

At least two bills were introduced in the House and referred to the House Merchant Marine and Fisheries Committee which contained identical provisions regarding financial responsibility. H.R. 6495, introduced by Mr. Garmatz, and H.R. 6609, introduced by Mr. Ashley, on February 6 and 7, 1969, respectively, to amend the Oil Pollution Act of 1924, each provided:

> Sec. 5. (a) Each owner of a vessel over three hundred gross tons and using any port or place in the United States shall establish, under regulations prescribed by the Federal Maritime Commission, his financial responsibility to meet the maximum liability to which the vessel could be subjected under this Act. . . .[123]

These bills appear to be the first to suggest a claim limited to U.S. internal waters. Even though this committee was destined not to be the originating committee of the WQIA, the influence of this bill is evident in the next bill, H.R. 7361.

Referred to the Public Works Committee

H.R. 7361 was introduced about a month later, on February 20th, by Congressman Blatnik and referred to the House Public Works Committee[124] of which he was second-ranking member. The approach of this bill was ultimately successful regarding financial responsibility for government clean up costs. In relevant part this bill to amend the Federal Water Pollution Control Act provided:

> Sec (j)(1) Any vessel over one hundred and fifty registered gross tons using any port or place in the United States or the navigable waters of the United States for any purpose shall establish and maintain under regulations . . . evidence of financial responsibility to meet the maximum potential liability to the United States which such vessel could be subjected under this section for negligent discharge of oil or matter. . . . (Emphasis added.)[125]

One immediately notes the most comprehensive claim

in the territorial sea yet considered in this bill. Indeed this bill appears to be the first to propose a requirement of financial responsibility of a vessel using the U.S. territorial sea "for any purpose" presumably including innocent passage. The earlier bills requiring financial responsibility (H.R. 15992, H.R. 6495 and H.R. 6609) were limited to vessels using U.S. ports, while the other bills previously introduced called for a study of the problem.

Section 17(j)(1) of H.R. 7361 emerged from this committee with some modification, as part of section 17(k)(1) of H.R. 4148,[126] and with further amendment ultimately became part of section 11(p)(1) of the WQIA. As noted before the claim over "any vessel . . . using . . . the navigable waters of the United States for any purpose" was never amended hereafter.[127]

As introduced H.R. 7361 did not contain a section calling for any study of financial responsibility. Regarding other damages this bill provided:

> Sec 17(h)(7) Nothing in this section shall effect or modify in any way the obligations of any owner or operator of any vessel or onshore or offshore facility under any provision of law for damages to any publicly or privately owned property from a discharge of oil or matter or from the removal of any oil or matter.[128]

The idea of this section was incorporated in section 11(o)(1) of the WQIA.

Hearings

By Senate Public Works Subcommittee on Air and Water Pollution

Senator Muskie's subcommittee on air and water pollution held extensive hearings on the two bills, S. 7 and S. 544, intermittently from February into June 1969. The subsections calling for a study of the financial responsibility problem received a limited amount of attention at those hearings. We shall examine seriatim the relevant testimony.

VADM James A. Hirshfield USCG (Retired)

The first witness to discuss the financial responsibility subsections was VADM James A. Hirshfield, USCG (retired) who testified on the second day of the hearings in his capacity as President of the Lake Carriers' Association of Cleveland, Ohio, representing the Great Lakes vessel industry.[129] He commented:

> . . . it is probably (sic) that a requirement of financial responsibility could be in conflict with the right of innocent passage. There is a clear preponderance of authority to the effect that sovereignty is qualified by what is known as the right of innocent passage, and that this qualification forbids the sovereign to prohibit the innocent passage of alien merchant vessels through its territorial waters.[130]

This testimony is the first mention of the innocent passage problem before any of the committees hearing evidence

on such proposals. It is unfortunate that his testimony was not subjected to any questioning by the subcommittees.

It may be noted that VADM Hirshfield had previously testified before the House Public Works Committee on H.R. 15906, 90th Congress, 2d Session (April 25, 1968) after Mr. Checket had made his proposal; VADM Hirshfield made no comment on his proposal at that time.[131]

Mr. Everett S. Checket

The order of witnesses was reversed on this occasion and Mr. Checket followed VADM Hirshfield as the next witness before Senator Muskie's subcommittee. Mr. Checket repeated his earlier suggestion in much the same language as before:

> . . . we would recommend that a provision requiring that a shipowner show evidence of financial capability be included. While section 12(j) of S. 7 and section 12(i) of S. 544 would authorize a study as to the desirability of such a system, we believe that such a system should be incorporated in the law now. Without such a provision, we can forsee a variety of circumstances under which it would be impossible for the Secretary of the Interior to recover the costs of oil removal from the party who caused the spill.
>
> . . . a foreign shipowner causing pollution might not be accessible to the Secretary for collection of costs resulting from pollution. In this last example, bear in mind that we are speaking of all categories of ships -- freighters, tankers, bulk cargo vessels, and so on -- which, in international commerce, constantly travel in and out of U.S. waters and, along with U.S.-flag vessels, are all potential sources of pollution.

. . . .

> Our suggestion is that every vessel, whether foreign or domestic, on entering a U.S. port or at the time of registry or enrollment, be required to demonstrate financial capability to meet the potential liability for oil removal established by law. . . . (Emphasis added.)[132]

One may note again that his proposal is limited to application in internal waters. Although VADM Hirshfield's warning about innocent passage had just been given to the subcommittee, no mention of it was made during Mr. Checket's testimony.

The colloquy which followed between Mr. Checket and Senator Dole illustrated the limited nature of his proposed claim:

> Senator DOLE. So your suggestion . . . is that TOVALOP would be an added protection. . . .
>
> Mr. CHECKET. . . . .(TOVALOP) would be particularly applicable to all of the foreign ships that come into the ports of the United States, of all sizes, descriptions, and financial resources.[133]

Mr. Checket's suggestion should have been understood by the members of the subcommittee as a limited claim. If it had not, testimony later that month spelled it out explicitly.

The Secretary of the Interior

The then Secretary of the Interior, Walter J. Hickel, submitted a statement to the subcommittee in person on February 28, 1969. That statement contained

the following pertinent language:

> We believe that the bill S. 7 could be further improved by adding another amendment, requiring that any vessel, except small and public vessels, using the navigable waters of the United States for any purpose, except for purposes of any innocent passage, should secure evidence of financial responsibility of such type and of such an amount to insure that the cost of any clean-up operations could be covered.
>
> . . . .
>
> We support the proposed study as set forth in proposed section 12(j) as it relates to the need for and the desirability of establishing a system of requiring vessels using the navigable waters of the United States to give evidence that such vessels have adequate financial capability within appropriate limitations to pay damage claims covering private, real, or personal property injured or destroyed by such discharged oil and other hazardous substances. (Emphasis added.)[134]

One must immediately note the expressly limited nature of this claim. In addition one can note that in adopting Mr. Checket's recommendation Secretary Hickel modified his department's bill, S. 544. He made no reference to the contiguous zone although it appeared in S. 544. One must note with regret that Mr. Hickel did not discuss this proposal in his oral presentation before the subcommittee and that thereafter he was not questioned about it by any member of the subcommittee on the record. It is therefore perhaps significant that the very language of the first paragraph quoted from Secretary Hickel's statement appears as section 11(p)(1) of the WQIA, but without the phrase "except for

the purposes of any innocent passage."

One explanation for the omission of the innocent passage exception may be gleaned from the following comment of Senator Muskie later that day in a colloquy with Russell Train, then Under Secretary of the Interior:

> Well, I think that as long as our attention and the country's attention is focused on this problem, we ought to enact the strongest possible kind of legislation, outside the 3-mile limit, and within the 3-mile limit. . . .[135]

A legitimate inference may perhaps be drawn from this statement that the innocent passge exception was deliberately omitted.

By House Public Works Subcommittee on River and Harbors

On the other side of the Capitol, the Subcommittee on Rivers and Harbors of the House Public Works Committee was holding almost simultaneously hearings on H.R. 4148 and H.R. 7361, each of which as may be recalled provided for a study of financial capability. Many of the same people who testified before Senator Muskie testified before Congressman Blatnik's subcommittee. Secretary Hickel and Admiral Hirshfield again were the only witnesses to point out the innocent passage problem. The other witnesses who spoke to the financial responsibility problem did not in their testimony very carefully describe the areas in which the requirement was to apply.

The Secretary of the Interior

Secretary Hickel testified before the House Subcommittees on Rivers and Harbors on financial responsibility on March 5th, five days after he had testified before Senator Muskie on that very same subject. He again stressed his support for the innocent passage exception but expanded the area of application of financial responsibility to the contiguous zone:

> To further assure that there would be responsibility we recommend that there be a requirement that any vessel, except small and public vessels, using the navigable waters and the waters of the contiguous zone for any purpose, except for purposes of innocent passage, secure evidence of financial responsibility of such type and of such an amount to insure that the cost of any cleanup operations would be covered.
>
> . . . .
>
> There is also a need for a study of the desirability of establishing a system of requiring vessels using the navigable waters of the United States and the water contiguous zone to give evidence that such vessels have adequate financial capability within appropriate limitations to pay damage claims covering private, real, or personal property injured or destroyed by such discharged oil and other hazardous substances. (Emphasis added.)[136]

VADM James A. Hirshfield
USCG (Retired)

The following day, March 6th, Admiral Hirshfield testified in support of H.R. 4148. His testimony regarding the innocent passage problem posed by section 12(i) of H.R.

4148 was identical to that given before Senator Muskie's subcommittee a month earlier except that he added one sentence by way of illustration of innocent passage. He stated:

> . . . it is probable that a requirement of financial responsibility could be in conflict with the right of innocent passage. By this I am referring to the necessity of Canadian and foreign-flag ships passing through U.S. waters on voyages between Canadian ports. There is a clear preponderance of authority to the effect that sovereignty is qualified by what is known as the right of innocent passage, and that is this qualification forbids the sovereign to prohibit the innocent passage of alien merchant vessels through its territorial waters.[137]

The subcommittee did not question Admiral Hirshfield.

It is perhaps belaboring the obvious to note that Admiral Hirshfield's formulation of the innocent passage problem begs the question to the extent that he meant to be understood to say that potential oil polluting vessels merely passing through the territorial sea were per se engaged in innocent passage. The real issue, of course, is whether such a vessel by virtue of that threat looses the innocent status under international law. Regardless, none of the other witnesses who appeared before the subcommittee addressed themselves to this question.

Current Coast Guard Officers

On this same day that Admiral Hirshfield testified five high-ranking and presumably

knowledgeable Coast Guard officers appeared before the subcommittee. These were the Commandant of the Coast Guard, the chief of the Office of Public and International Affairs and U.S. Delegate to IMCO, the chief of the Law Enforcement Division, the chief of the Legislative and Regulations Division and the assistant chief of the Hazardous Materials Division. None of these officers were asked any questions about this issue nor did any of them raise the point.[138]

Mr. Everett S. Checket

Also on March 6th, Mr. Everett S. Checket testified before this subcommittee. His testimony regarding financial responsibility noted support of H.R. 7361 which had incorporated his earlier suggestion. He pointed out that the other four bills before the subcommittee "would only authorize a study as to the desirability of such a system."[139] His testimony here made no mention of the geographical area of applicability of the financial responsibility requirements. However, as noted above, H.R. 7361 spoke of using "the navigable waters of the United States for any purpose"[140] while the language of his proposal was limited to vessels using United States ports.[141] One cannot therefore tell from this record whether he recognized this difference or affirmatively acquiesced in the more comprehensive formulation of H.R. 7361.

The Maritime Law Association

The Maritime Law Association again submitted a statement on this legislation. The Special Committee stated that it had examined the many oil pollution bills before the subcommittee very carefully. However they made no mention of the innocent passage problem. Their concern remained the possible reciprocity of other nations placing similar economic burdens of increased insurance costs on the U.S. merchant fleet. Their statement did not distinguish as to the area of our waters this requirement was to extend.[142]

Conservationists

The conservations had several comments regarding foreign vessels being subjected to the financial responsibility requirements.

League of Women Voters[144]

The statement of the League of Women Voters of the United States inferentially lent support for the limited claim of authority over foreign vessels using United States ports. The statement said:

> Yet we see the inequity of placing unlimited liability on ships flying the American flag where similar responsibility cannot be required from ships of foreign register. Although total responsibility for all ships would be desirable, the proposal to require evidence of financial responsibility up to a certain sum from all ships, foreign and domestic, at the time of entry into a

> United States port may be the best that can be done at this time. . . . (Emphasis added.)[145]

Their statement does not identify to which bill they are referring. None of the bills pending before that subcommittee then was limited to internal waters.

National Wildlife Federation[146]

The chief of the Conservation Education Division of the National Wildlife Federation, Mr. Louis S. Clapper, made a strong statement, on March 4th, before the subcommittee in favor of H.R. 4148 including in the regulations all foreign vessels using U.S. waters.

> In our opinion, Mr. Chairman, these (oil) spills no longer can be accepted or tolerated. Strong legislation must be enacted and enforced upon all owners of vessels, both domestic and foreign, using navigable waters. . . .
>
> . . . .
>
> . . . provision for the Secretary of Transportation to study the need for and desirability of requiring that vessels give proof of financial capability to reimburse the U.S. for costs of cleanup is in order, and we assume such investigations would cover applications to ships of foreign registry as well as those of the U.S. when they use U.S. waters.[147]

Congressional Reaction

The attitude of the subcommittee may be reflected in a comment made by Congressman Sullivan on the third day of these hearings:

> . . . We are talking about protecting the coastal waters of the United States. . . . /W/hen a vessel comes into the ports of the United States, they should be covered in case of a spill.[148]

However, Mr. Sullivan was using language here suggestive of a limited claim.

Committee Action

House Public Works Committee

H.R. 4148 Reported Out

The House Public Works Committee reported out H.R. 4148 with amendments on March 25, 1969.[149] It contained provisions similar to but broader than those proposed by Mr. Checket:

> Sec 17(k)(1). Any vessel over one hundred gross registered tons, including any barge of equivalent size, using any port or place in the United States or the navigable waters of the United States for any purpose shall establish and maintain under regulations . . . evidence of financial responsibility to meet the maximum potential liability to the United States which such vessel could be subjected under this section for willful or negligent discharge of oil or matter. . . .
>
> . . . .
>
> Sec 17(k)(3). The Secretary of Transportation, in consultation with . . . shall conduct a study of the need for and, to the extent determined necessary --
>
> (A) other measures to provide financial responsibility and limitations of liability with respect to vessels using the navigable waters of the United States. . . . (Emphasis added.)[150]

One may note the presence of a broad claim without the limitation for innocent passage recommended by Secretary Hickel and Admiral Hirshfield.[151] The language here reported out was obviously taken from section 17(k)(1) of H.R. 7361 previously discussed,[152] and was the claim ultimately enacted as section 11(p)(1) of the WQIA.

Committee Report

An examination of the House Public Works Committee Report of H.R. 4148 is of little help regarding the innocent passage problem. In relevant parts it states:

Part I, General:

. . . .

> Barges are specifically included in subsection 17(k)(1), requiring evidence of financial responsibility, because many barges are not registered.[153]

Nothing else is said in this section about section 17(k)(1).

The information set forth regarding section 17(k)(3) is little more revealing:

> The study of requirement for financial responsibility and limits of liability called for in subsection 17(k)(3) is necessary because neither the affected industries nor international underwriters have any previous experience in this area of discharge cleanup, and they were unable to supply the committee with adequate factual information in this regard. It is hoped that the results of the study, plus any experience gained in the interim, will disclose any need for amendment that may exist.[154]

The section-by-section explanation set forth in Part II of the House Report merely repeats the language of the bill as quoted above.[155]

House Action

H.R. 4148 was debated on the floor of the House on April 15th and 16th, 1969 but these provisions were not discussed.[156] The bill passed the House on April 16th.[157] On April 18th it was received by the Senate and referred to the Senate Public Works Committee[158] which was still taking testimony on S. 7 and S. 544.

Senate Public Works Committee

Additional Hearings by Subcommittee

Later that spring additional testimony regarding S. 7 and S. 544 was taken by Senator Muskie's subcommittee.

Department of State

On May 20th, 1969, in executive session the subcommittee heard Mr. Richard A. Frank, then acting Deputy Legal Advisor, U.S. State Department testify regarding the then pending preparatory negotiations for the IMCO International Legal Conference on Marine Pollution Damage 1969.[159] In the course of his testimony Mr. Frank stated regarding the financial responsibility idea:

> We are thinking of putting in the (civil liability) convention provisions which are going to make it very difficult for those states which don't ratify, because a State that does ratify may be able to keep a ship of a State that does not ratify out of its ports, or it may be able to insist that that ship, even though it is not covered by the convention, when it is within territorial waters, has financial security.
>
> . . . .
>
> . . . It seems to me we have to be very careful when we adhere to a convention, or we have legislation, to make it clear that we are not prejudicing our own shipping and the wat to do that is to require all ships that come to our ports to be covered by this.[160]

Although the first portion of this testimony may support a broad claim, the latter portion is clearly a claim limited to internal waters. Unfortunately, Mr. Frank made no mention of the financial responsibility provisions of the pending legislation or its relationship to the innocent passage counterclaim.

Another Senator's Thinking

How one member of the subcommittee was viewing this question in late May 1969 is revealed by these questions asked by Senator Boggs of Mr. P. J. Kreuzkamp, vice president of Alexander and Alexander, a New York international insurance brokerage firm which placed most of the U.S. flag protection and indemnity (P & I) insurance:

> Sen. BOGGS. . . . In the bill we have under consideration, the provisions would apply to any ship that comes (sic) into the U.S. waters,

> foreign ships as well as U.S. vessels . . .
>
> . . . .
>
> Sen. BOGGS. How do the U.S. Merchant Marine figures compare with figures for foreign ships that enter U.S. ports? What is the number of foreign ships that enter U.S. ports per year?[161]

These questions seem to indicate that Senator Boggs had a limited claim in mind, the second quotations indicating a narrower claim than the first. Perhaps it also suggests fuzzy thinking on his part or a bad memory.

S. 7 Reported Out

On August 7th, 1969, the Senate Public Works Committee reported out S. 7, as a Senate substitute for but in the nature of an amendment to H.R. 4148.[162] Section 12(f)(2)(A) of S. 7 stated:

> Each owner or operator of a vessel over three hundred gross tons, including any barge of equivalent size, using any port or place in the United States, shall establish and maintain, under regulations . . . evidence of financial responsibility of $100 per gross ton of the liability to which the vessel could be subjected under paragraph (1) of this subsection. . . .[163]

It may be noted that this version of S. 7 did not contain any provision for a study of financial responsibility as was contained in the House-passed H.R. 4148.[164] It must also be noted that the words "for any purpose" do not appear in S. 7 after the words "navigable waters of the United

States" although they did appear in section 17(k)(1) of H.R. 4148 as previously passed by the House.[165]

Committee Report

The report of the Senate Public Works Committee on S. 7 did however contain the words "for any purpose" after "navigable waters of the United States":

> Section 12(f)(2)---Financial responsibility This section would provide that any vessel over 300 gross tons which use any port or place in the United States or the navigable waters of the United States for any purpose must establish evidence of financial responsibility of $100 per gross ton to meet the maximum potential liability to the United States which the vessel could be subjected to under section 12(f)(1). . . .[166]

Apparently then one cannot consider the omission of those words to signify any lessening of the breadth of the claim proposed. Certainly no mention is made in the Senate report of the innocent passage counterclaim raised during the hearings before this committee on S. 7.

Senate Action

S. 7 finally was taken up on the floor of the Senate on October 7th and 8th.[167] During the two day debate the innocent passage issue was not ever directly mentioned. The only relevant comments made on the floor regarding financial responsibility did not question the extent of the claim.

Senator Gravel's Comments

Senator Mike Gravel submitted a statement which contained this language:

> . . . I am also deeply disturbed by those provisions of Section 12(f) of the bill which require all vessels over 300 tons which utilize American ports or waterways to establish "financial responsibility" for oil cleanup costs of only $100 per gross ton but which simultaneously provide that, in the event of an actual oil spill, the vessel's statutory liability for cleanup costs /might be higher/. (Emphasis omitted.)[168]

Senator Gravel was concerned about the bill's not requiring insurance to the maximum liability imposed by the bill. In the process he stated the bill's applicability as a comprehensive claim in the territorial sea.

Senator Cooper's Assumptions

Later in the debate that day Senator John Sherman Cooper, a member of the Public Works Committee, speaking in support of the bill, stated:

> In order to impose on all vessels a uniform standard of liability the bill requires that all vessels using the ports or waters of the United States must show evidence of financial responsibility to meet liability for the cost of removal to a limit of $100 per gross ton. . . .[169]

His statement clearly assumes the validity of the comprehensive claim over all foreign vessels in U.S. territorial sea. Nowhere in his comments on the Senate floor, or in anyone's comments, is there even a suggestion of the innocent

passage exception.

Passage of S. 7

Finally, on October 8th, 1969, S. 7 was passed unanimously by the Senate.[170] Since S. 7 was a substitute for H.R. 4148 the bills were sent to a conference committee.

Conference Committees

Bill Reported Out

Five months after S. 7 and H.R. 4148 went to conference committee and three months after the Brussels Civil Liability Convention was signed,[171] but before that convention was submitted to the Senate for its advise and consent to ratification,[172] the conference committee reported out a compromise bill that was more similar to H.R. 4148 than S. 7. The bill as reported out of conference on March 24, 1970[173] however, was unchanged between that form and as finally enacted. It stated:

> Section 11(p)(1) Any vessel over three hundred gross tons, including any barge of equivalent size, using any port or place in the United States or the navigable waters of the United States for any purpose shall establish and maintain under regulations . . . evidence of financial responsibility of $100 per gross ton, or $14,000,000 whichever is the lesser, to meet the liability to the United States which such vessel could be subjected under this section. . . .[174]

As previously anticipated the broadly states claim remained ostensibly unlimited by any innocent passage exception.

Conference Report

The conference report on this bill did not explain why the innocent passage exception was omitted. The report simply stated:

> Subsection (p) is essentially the same as the equivalent provisions of the House bill relating to the financial responsibility of vessels except that where the House bill required vessels over 100 gross registered tons to establish evidence of financial responsibility, this provision requires vessels over 300 gross tons to do so and the limits of liability are specified to be the same as those contained in subsection (f)(1), that is, $100 a gross ton or $14 million, whichever is lesser. . . .
>
> . . . .
>
> Paragraph (4) of subsection (p) is essentially the same as the provisions of the House bill relating to a study of the need for other measures to provide financial responsibility and to limit liability on vessels. . . .[175]

The conference report simply makes no mention of innocent passage.

Enactment of the Water Quality Improvement Act

Senate Action

The Senate acted on the conference report the same day that the bill was reported out of conference committee. After a rather short floor debate on the report,[176]

The Senate unanimously adopted the conference report on March 24, 1970.[177] The discussion on the floor added nothing to an understanding of the comprehensiveness of the claim set forth in section 11(p)(1).

House Action

The House considered the conference report the following day, March 25th. With even less discussion on the floor,[178] the House also unanimously adopted the conference report.[179] As in the case of the Senate debate, the House discussion adds nothing to an understanding of the claim.

Presidential Signature

The President signed the Water Quality Improvement Act of 1970 into law on April 3, 1970.[180] Consequently this claim over foreign vessels engaged in innocent passage through United States territorial seas became effective April 3, 1971.[181]

Executive Implementation

Federal Maritime Commission

Regulations

Pursuant to authority delegated to it,[182] on September 29, 1970 the Federal Maritime Commission issued as its General Order 27 regulations implementing section 11

(p)(1) of the WQIA effective October 3, 1970.[183] To date[184] these regulations, constituting title 46 Code of Federal Regulations part 542--Financial Responsibility for Oil Pollution Cleanup--have been amended five times.[185] Neither the original regulations nor any of the amendments recognize an innocent passage exception to their applicability.

The relevant provisions of 46 Code of Federal Regulations, part 542 provide:

> Sec. 542.1 Scope.
>
> The regulations contained in this part set forth the procedures whereby the owner or operator of every vessel over 300 gross tons . . . using . . . the navigable waters of the United States for any purpose after April 2, 1971, shall establish and maintain evidence of financial responsibility of $100 per gross ton, or $14 million, whichever is the lesser, to meet the liability to the United States to which any such vessel could be subjected pursuant to section 11, Water Quality Improvement Act of 1970, for the discharge of oil into or upon the navigable waters of the United States, adjoining shorelines, or into or upon the waters of the contiguous zone. . . .
>
> Sec. 542.2 Definitions.
>
> . . . .
>
> (p) "Navigable waters of the United States" include the coastal territorial waters of the United States, the inland waters of the United States including the United States portion of the Great Lakes and the St. Lawrence Seaway, and the Panama Canal.
>
> . . . .
>
> Sec. 542.3 Proof of financial responsibility, when required.
>
> (a) No vessel over 300 gross tons . . . shall

use any port or place in the United States or the navigable waters of the United States on or after April 3, 1971, for any purpose unless a Certificate has been issued covering such vessel.

. . . .

Sec. 542.4 Procedure for establishing financial responsibility.

(a) Either owners or operators of vessels subject to sec. 542.3 must file an application on Form FMC-224 for a Certificate of Financial Responsibility (Oil Pollution).

. . .

(b)(2) . . . an applicant . . . should file a completed application at least 45 days in advance of any of its vessels using any port or place in, or the navigable waters of, the United States. Applications will be processed in order of receipt. Requests for special consideration, however, will be granted where applications involve bare-boat charters or unusual situations, if good cause is shown by the applicant. All applications, evidence, documents, and other statements required to be filed with the Commission shall be in English.

. . .

. . . .

(d) Each applicant, insurer, surety, and guarantor shall furnish a written designation of a person in the United States as legal agent for service of process for the purposes of the rules of this part. . . .

. . . .

Sec. 542.6 Issuance of Certificate of Financial Responsibility.

(a) . . . where evidence of financial responsibility has been established, a separate Certificate covering each vessel shall be issued. . . The period covered by each Certificate shall be indeterminate unless a termination date has been specified thereon. A certificate issued . . . or a copy thereof,

must be carried on board the certificated vessel. Where it would be physically impossible for the Certificate or copy thereof to be carried aboard the certified vessel, it must be retained at a location in the United States and kept readily accessible for inspection by U.S. Government officials: Provided, however, That where it would be physically impossible for the Certificate or copy thereof to be carried aboard the certified vessel, the Federal Maritime Commission Certificate number, preceded by letters "FMC", must be marked upon each bow of such vessel in such manner as to be readily discernible, but in no event shall the letters and numbers used be smaller than three inches in size.

. . . .

Sec. 542.9 Fees.

(d) Every Application Form FMC-224 shall be accompanied by an application fee of $100 which shall not be refundable.

(e) In addition to the application fee, a vessel certificate fee for each vessel listed on the application, subject to a maximum total certification fee of $1,000 shall be paid by the applicant in accordance with the following gross tonage schedule: For each vessel

over:	Fee
300 to 1,200 gross tons	$ 2
1,200 to 5,000 gross tons	5
5,000 to 10,000 gross tons	10
10,000 to 30,000 gross tons	15
30,000 gross tons	25

. . . .

Applications and Certifications

These regulations thus establish a significant administrative and financial burden on the shipowner beyond his cost of obtaining requisite evidence of insurance.[186] For

a Certificate for a fleet of 40 vessels each over 30,000 gross tons listed on one application would cost $1,000, while the same number of similar sized vessels registered as single-ship corporations would cost $5,000. Fortunately, renewal certificates are not required each year.

The breadth of coverage of the world's merchant fleet by these regulations is difficult to measure with accuracy at this time. The records of the Office of Oil Pollution Responsibility, Bureau of Certification and Licensing, Federal Maritime Commission, wherein the applications are processed, are only now in the early stages of being incorporated into a data processing system.[187] Any statistics available are based on manual counts. A count by the author[188] from a listing of all vessels certified by the FMC as of May 27, 1971, revealed that apparently more than half of the non-U.S. flag merchant vessels of the world have complied with the WQIA financial responsibility provisions.[189] Furthermore, about 55% of the world's largest tankers (over 200,000 dwt) had also complied.[190] The significance of these figures is examined below in Chapter VI.

Enforcement

Because of the large number of applications still outstanding[191] the FMC has ordered that

> any vessel, subject to the financial responsibility provisions of section 11(p)(1)

> . . . for which an application for a Certificate of Financial Responsibility (Oil Pollution) has been filed and required evidence of financial responsibility submitted, but which does not have its Certificate aboard, will be deemed to be in substantial compliance with section 11(p)(1) of the Act and the Commission's implementing regulations. . . .[192]

The enforcement personnel of the U.S. Coast Guard or the Customs Inspectors of the U.S. Treasury Department accordingly, when they board a vessel making for U.S. internal waters, ask to see the Certificate. If the Certificate is not available, then those officials ask for the registered name of the vessel, the name of the owner or operator having applied for the Certificate, and "the control or Certificate number which has been assigned to each application or Certificate" by the FMC.[193] This information is then forwarded to the FMC to determine its accuracy.[194]

Those vessels which are found not to be in compliance are informed of the requirements of the Act and given the necessary application information.[195] No other enforcement actions are being taken at this time.[196]

The author has been informed that, except for passage through the Panama Canal, and the rare vessel observed to be leaving a wake of oil, no attempt is currently being made to check vessels engaged in innocent passage through the U.S. territorial sea.[197]

The United States is however, requiring all vessels

desiring to pass through the Panama Canal to show compliance with section 11(p)(1) before they are permitted to pass through the Canal.[198] This enforcement is based on the unusually broad statutory territorial application of the Act's definition of "United States" to include the Canal Zone.[199] This application of the Act requires a separate examination of the problems of innocent passage through international straits.

Section 11(p)(4) Study

The reader may recall that Senate bills S. 7 and S. 544 called for a study of the whole financial responsibility problem[200] but that the conference committee decided to require financial responsibility of vessels for U.S. cleanup costs and have a study of the other aspects of financial responsibility.[201] The study was conducted under contract from the Coast Guard[202] to the Program of Policy Studies in Science and Technology of the George Washington University. This interdisciplinary study was conducted during the period October to December 1970, and was submitted to the Coast Guard in mid-December,[203] presumably in time for it to be staffed, a report prepared and submitted to the President and the Congress in accordance with statutory deadline of January 1, 1971.[204] However the report was not transmitted to the President and the Congress until March 15, 1971.[205]

The report does not contain any recommendations or discussion of the innocent passage problem, presumably because it does not relate directly to the purpose of the report. However, the study does contain a brief discussion of the problem and a recommendation for its elimination.

In a section concerning the purposes for which jurisdiction is exercised, the study states:

> Right of Innocent Passage
>
> As is apparent, there is a conflict between Section 11(p)(1) of the WQIA and the right of innocent passage of foreign vessels through the United States territorial sea. This conflict may be particularized as follows:
>
> Article 14 of the 1958 Geneva Convention on the Territorial Sea and the Contiguous Zone sets forth the present international law regarding innocent passage. It provides in relevant parts that:
>
> (1) . . . ships of all States . . . enjoy the right of innocent passage through the territorial sea . . .
>
> (2) /not applicable/
>
> (3) /p/assage includes stopping and anchoring, but only insofar as the same are incidental to ordinary navigation or are rendered necessary by force majeure or by distress.
>
> (4) /p/assage is innocent so long as it is not prejudicial to the peace, good order, or security of the coastal State. . . .
>
> Consequently a vessel loading or unloading at an offshore terminal within the territorial sea would not be engaged in innocent passage. Article 15 of the same convention, however, prohibits the coastal state from "hamper/ing/ innocent passage through the territorial sea." Nevertheless the Federal Maritime Commission has done so in Section 542.3 of its regulations

> implementing Section 11(p)(1) of the WQIA which regulations were issued as required by Section 11(p)(2):
>
> (a) No vessel over 300 gross tons, including any barge of equivalent size, shall use any port or place in the United States or the navigable waters of the United States on or after April 3, 1971, for any purpose unless a Certificate has been issued covering such vessel. (35 Fed. Reg. 15216, 15220 (September 30, 1970) (Emphasis added.)
>
> This regulation essentially restates the relevant portions of subsections 11(p)(1) and 11(p)(2). It prohibits, after April 3, 1971, any foreign vessel from merely traversing the United States territorial sea without ever entering United States internal waters unless it complied with this domestic legislation requiring obtaining requisite financial responsibility and the prescribed certificate. Such a broad proscription is in violation of the above-quoted international law and United States treaty obligation. An amendment of Section 11(p)(1) is necessary to exclude from this proscription foreign vessels engaged in merely innocent passage through United States territorial sea.[206]

In relevant part the study concluded regarding the right of innocent passage:

> Section 11(p)(1) of the WQIA, implemented by 46 CFR Section 542.3 is in violation of Article 14 of the 1958 Geneva Convention of (sic) the Territorial Sea and the Contiguous Zone because it violates the present international law regarding innocent passage of foreign vessels through United States territorial waters.[207]

The Study accordingly recommended that "sections 11(p)(1) and 11(m) of the Act should be amended to exclude application of the WQIA to foreign vessels exercising the right of

innocent passage through territorial waters of the United States."[208]

Summary of the History of "For Any Purpose"

The legislative history of the United States claim to authority over foreign vessels in territorial seas for purposes of requiring evidence of financial responsibility may be summarized as follows:

1. All bills considered by the Public Works Committees of both Houses contained broadly stated claims to authority.

2. No bill considered by the Public Works Committees contained an innocent passage exception to the claim.

3. The counterclaim to innocent passage was brought to the attention of both Public Works Committees during hearings.

4. The WQIA was during its gestation only under the consideration of the Public Works Committees.

5. The public records do not show any specific reason, jusitification or excuse for not including an innocent passage exception.

6. The apparent attitude of the Congressional committees was to do everything possible to protect the United States and its citizens from oil pollution and its harmful effects and to ensure payment for any damages which might result from that pollution.

Competence Claimed

Scope

One can only conclude from this legislative history that Congress intended "for any purpose" to include innocent passage to the extent consistent with the law -- or to the extent the claim would not be opposed and would be recognized. The conclusion seems inescapable that the innocent passage exception was purposefully omitted by Congress in order to maximize the claim to protection of U.S. coastal state interests.[209]

Objectives and Interests Sought to be Protected

The stated objective is to insure that money will be available to pay the costs of the U.S. government incurred in cleaning up oil pollution caused by all vessels in U.S. territorial waters regardless of the purpose of their presence in those waters. This objective serves to protect the wealth position of the U.S. government. Since the U.S. Treasury is not noticeably that short of cash, and since the WQIA does not provide direct financial protection to private persons damaged by oil pollution, this objective cannot be considered the primary purpose.

Because of the demonstrated high cost of oil pollution liability insurance,[210] it is quite realistic to believe that a prime purpose of the WQIA financial responsibility requirements is to create one more motivation to make oil

pollution less likely to occur, i.e. the objective may be prevention of pollution indirectly encouraged through the financial incentive of lower premiums for a "safe driving record". This is a legitimate objective. Requiring financial responsibility of all vessels must however be recognized as an indirect pressure to achieving an unstated primary goal of preventing oil spills.

Financial responsibility requirements of all vessels in the territorial sea may have a secondary or latent objective of acting as a stimulant of international activity to achieve a primary goal of having funds available to all who are injured by oil pollution regardless of source of the oil and regardless of the location of the person injured. Although the Canadian actions may well embrace this objective, there is little evidence in the legislative history of the WQIA to indicate that was a consciously adopted objective. As will be seen below, that indeed was the result of the U. S. and Canadian unilateral actions.

Another latent objective of the U.S. claim could be to increase U. S. world power. However nothing indicates that purpose to have been considered. The effect of the U. S. claim indeed seems to have been to give greater world influence in the general subject matter of marine pollution prevention and indeed the Law of the Sea.

Canadian Claim

The Canadian government in 1970 and 1971 enacted several very comprehensive and strong pollution control laws. Only two relatively minor aspects of them are currently in force. Nevertheless the total impact of these laws and implementing regulations insofar as it relates to financial responsibility should be examined, in part because of the Canadian claim's significant differences from both the U.S. and the British approaches to this aspect of pollution control, and in part because of the international impact of the Canadian claim. Since other aspects of the claim have been extensively examined elsewhere,[212] they will not be repeated herein, except as necessary to an understanding of the Canadian claim.

General

The Canadian legislation in 1970 was enacted in response to the perceived threat of pollution from the S. S. Manhattan's navigations through the Arctic.[213] Canada by statute increased her territorial sea width from 3 miles to 12 miles and authorized the establishment of exclusive fishing zones beyond 12 miles,[214] simultaneously withdrawing her consent to compulsory jurisdiction of the International Court of Justice on these issues.[215] She also enacted, but has not yet implemented, the Arctic Waters Pollution Prevention Act of 1970.[216] This act declared as an anti-pollution

zone all waters within 100 miles from Canada's Arctic coast, forbade pollution in that zone, imposed penalties and civil liabilities for all violations, authorized requiring within specially designated shipping safety control zones financial responsibility, and authorized comprehensive regulation and inspection, including construction standards, of vessels in such zones. She enacted in March 1971 similar legislation, not yet implemented, with regard to her territorial sea, exclusive fishing zones and internal waters off her Atlantic and Pacific coasts, and in those portions of the 100 mile Arctic waters and pollution zones not within designated shipping safety control zones.[217]

Areas of Application

Examination of a map of Canada reveals that Canada has three separate coastlines, each with international straits, each of significantly different aspects. Canada's western coast runs about 500 miles northwestward from the Seattle, Washington-Vancouver Island area (at about 54°N, 125°W) to the southern tip of the Alaskan panhandle (at about 55°N, 130°W). The large Canadian island of Queen Charlotte lies off the northern portion of the west coast and is bounded on the north by the international strait of Dixon Entrance and the east by Hecate Strait leading south to Queen Charlotte Sound which in turn lies to the westward of the middle portion of Canada's western coastline.

Canada's eastern coastline is much more complex in geography containing the peninsula and islands guarding the mouth of the Gulf of St. Lawrence and the northward coastline on the Labrador Sea up to 60°N, 65°W. The two principle entrances to the Gulf of St. Lawrence are through Cabot Strait in the center and the Strait of Belle Isle to the north between Newfoundland island and mainland. In addition at the south is the important Bay of Fundy between New Brunswick and Nova Scotia off the northeastern-most Maine coast.

Finally there is the Canadian Arctic which, in the general shape of a right triangle, runs from a point in the northwest at the northeastern Alaskan border north of the Arctic Circle (at about 70°N, 140°W), in a northeastward line about 1500 miles to a point near the northern tip of Greenland (at about 83°N, 60°W), and then on a line roughly due south for about 1600 miles to the mouth of Hudson Strait (at about 60°N, 65°W).

The Canadian anti-pollution legislation reaches much of ocean area bordering this coastline. In addition to the 12-mile territorial sea,[218] she has claimed as exclusive high seas fishing areas, on the east coast, the Strait of Belle Isle, Cabot Strait and the Bay of Fundy, and on the west coast, Dixon Entrance and Queen Charlotte Sound.[219] In addition to the 12-mile territorial sea claimed in Arctic

waters, Canada also claims the right to control pollution in high seas areas of the Arctic waters to a distance of about 88 additional miles contiguous to and outside her territorial sea.[220]

Arctic waters are defined to be those waters above 60°N and west of 141°W.[221] Portions of those waters may be designated as "shipping safety control zones" in which particularly stringent regulation of pollution may be undertaken.[222]

Accordingly Canada claims jurisdiction for pollution control purposes over not only her 12-mile territorial sea but also over arctic waters extending 100 miles seaward from her northern coastline and over all of the Gulf of St. Lawrence and the Bay of Fundy in the east and almost an 88 mile-wide stretch of high seas from the northern tip of Vancouver Island to the southern tip of the Queen Charlotte Islands. Canada therefore claims pollution control jurisdiction over an 88 mile-wide "strip" of high seas on all her coastlines except off the islands of Queen Charlotte and Vancouver in the west, and Nova Scotia and Newfoundland in the east. This leaves only a small percentage of Canada's coasts (about 2000 miles) to be protected by her 12-mile territorial sea. It should be noted that under the 1954 Oil Pollution Prevention Convention, as amended in 1962,[223] the prohibited zones are 100 miles wide off Canada's east

and west coasts and 50 miles wide in the northern arctic.[224]

Innocent Passage

The Canadian government recognized the existence of the innocent passage counterclaim to the claims set forth in the Arctic Waters Act. However her public position evidenced a lack of understanding of the position of the opposing claims of pollution control and innocent passage in the territorial sea:[225]

> It is the Canadian position that any passage threatening the environment of a coastal state cannot be considered innocent since it represents a threat to the coastal State security.[226]

> . . . Canada cannot accept any right of innocent passage if that right is defined as precluding the right of a coastal state to control pollution in such waters /the territorial sea/. The law may be undeveloped on this question, but if that is the case, we propose to develop it.[227]

> /The Government of Canada intends to/ open up the Northwest Passage as a water-way for innocent passage by ships of all states, by laying down conditions for the exercise of such passage; by establishing that the passage of ships threatening pollution will not be considered innocent. . .[228]

These views on innocent passage seem to hold that the coastal state decides for itself under what circumstances passage is not innocent.[229] Let us see next in what parts of the Canadian territorial sea financial responsibility is claimed to be required by Canada and to what activities of vessels in those areas that claim runs.

Financial Responsibility

Since the concept of innocent passage revolves about activities in the territorial sea,[230] only the applicability of the Canadian financial responsibility requirements in the territorial sea is considered.

It seems clear that under Canadian law financial responsibility may be required in shipping safety control zones.[231] These zones are any area of areas of arctic waters (i.e., internal waters, territorial sea or high seas) so designated by the Prime Minister and his cabinet.[232] In such zones financial responsibility may be required of the owners of a ship and of its cargo if the ship "proposes to navigate or . . . navigates within" any such zone.[233] In these zones all ships, regardless of cargo or method of propulsion, regardless of purpose of being in or of traversing those waters, and regardless of destination, may be required to establish financial responsibility.[234] Innocent passage may thus be affected in such a zone within the Canadian arctic territorial sea.

In those portions of the Canadian territorial sea not within shipping safety control zones, whether or not in the arctic,[235] "the owner of any ship that carries a pollutant[236] in bulk[237] to or from any place in Canada"[238] (presumably meaning to or from internal waters) and the owner of that pollutant[239] may be required to establish

financial responsibility.[240] Since this requirement seems to apply only to vessels going to or from Canadian internal waters, innocent passage would not seem to be affected in those portions of the Canadian territorial sea not within a shipping safety control zone.[241] The innocent passage would thus seem to be affected by the Canadian financial responsibility requirements only in the portions of the Canadian arctic territorial sea designated as shipping safety control zones. Innocent passage does not seem to be affected in any of the Canadian territorial sea on her east or west coasts. Therefore it seems that the Canadian claim to require financial responsibility is in considerably less conflict with the innocent passage counterclaim in the territorial sea than is the United States claim.[249]

A brief description of the civil liability schemes of these two acts will be helpful for comparative and appraisal purposes.

Civil Liability

Both the Arctic Waters Act and the Pollution Part of the Canada Shipping Act claim to impose civil liability for the same types of oil pollution damages. These include both "all actual loss or damage incurred"[243] as well as governmental prevention, mitigation and cleanup expenses.[244] Liability under both acts is "absolute and does not depend upon proof of fault or negligence."[245] However the acts

differ in defenses to liability. Under the Arctic Waters Act the only defense is that of act of a third person,[246] while the Canada Shipping Act permits in addition the three defenses permitted under the Brussels Civil Liability Convention.[247]

Both acts provide for limitations of liability. The Arctic Water Act permits limitations to be set by regulation "taking into account the size of such ship and the nature and quantity of the cargo carried or to be carried by it."[248] The Canada Shipping Act expressly limits the liability of the ship owner or cargo owner in the identical manner and to the identical amounts set forth in the Brussels Civil Liability Convention, that is, $134 per ton/$14 million maximum, with no limit if there is "actual fault or privity" on the part of the owner.[249]

Compensation Fund

The Arctic Waters Act makes no provision for compensation to victims beyond the limitations of liability which may be set by regulation. Thus in a major catastrophe some damages could well go uncompensated for lack of funds. In the Canada Shipping Act a "Maritime Pollution Claims Fund" is established[250] and extensive statutory regulations written.[251]

This fund would be supported by a tax on pollutants imported into or exported from Canada as ship's cargo.[252]

The act provides for a tax not to exceed 15 cents per ton of oil imported or exported.[253] The actual tax rate on oil is to be set by regulation.[254] Regulations may also be issued imposing any tax on any other pollutant.[255] There appears to be no monetary limit on the maximum amount of damages which can be paid from this fund. It is designed to apply in those situations where other normal measures fail to provide full compensation for damages.[256]

Since the Canada Shipping Act applies to arctic waters "not within a shipping safety control zone,"[257] the anomalous situation appears to exist that damages resulting from a catastrophic accident in a shipping safety control zone would not necessarily all be compensated even though similar damages from an accident in a supposedly safer portion of the arctic waters would be all paid.[258] Draft articles for an international convention to establish a similar International Fund for the Compensation of Oil Pollution Damage supplementary to the Civil Liability Convention have been prepared.[259] Such an International Fund could well fill this gap. This fund would insure compensation to a total of $30 to $60 million. It would be funded through a tax on oil imported by sea although the amount of tax has not been agreed upon.[260]

British Claim

Great Britain has recently taken action to strengthen her oil pollution laws. On 8 April 1971 she enacted the Oil in Navigable Waters Act 1971[261] to implement the Intervention Convention and the 1969 Amendments to the 1954 Oil Pollution Prevention Convention.[262] The Intervention Convention was previously ratified by Great Britain on January 12, 1971.[263] Great Britain has accepted the 1969 amendments to the 1954 Oil Pollution Prevention Convention.[264]

She is also considering certain implementing legislation of the Civil Liability Convention. Apparently this legislation, The Merchant Shipping (Oil Pollution) Bill, will enact as domestic law the financial responsibility requirements of the Civil Liability Convention.[265] If so the financial responsibility requirements of foreign vessels in British territorial waters would apply only to those vessels making for internal waters or ports.[266] This provision appears to be in compliance with the requirements of Article VII paragraph 11 of the Civil Liability Convention discussed below.[267]

The British claim is therefore markedly different from the United States and Canadian claims in that it is much more limited in application and does not apply to vessels engaged in innocent passage through British territorial seas.

CHAPTER III

THE DECISION-MAKING PROCESS

The process of authoritative decision to which claimants may turn for resolution of the competing claims of financial responsibility and innocent passage is the constitutive process of the world arena. This process has been briefly described as:

> decision-makers /participants/, seeking to promote certain community objectives, while acting within certain arenas of authority and utilizing certain bases of power, by employing a wide variety of strategies or instruments of policy, to achieve specific outcomes in the prescription and application of policies, with important effects not only upon the claimants but also upon other participants and their communities, under all the rapidly changing conditions of the contemporary world power and other social processes.[268]

The emphasized terms provide convenient categories by which to describe the process as applicable to the conflict under consideration.

Decision-Makers

In the most comprehensive conception, relevant decision functions are performed, with varying degrees of prominence and limitation, by all the participants in the world social process, i.e., officials of nation-states, international governmental organizations, political parties,

private associations, pressure groups, and the individual human being.[269] Although international officials are increasingly using the functions to make and apply policy (intelligence, recommending, invoking, prescribing, applying, appraising and terminating), it remains true that "the most important issues about the use of the oceans are decided by officials of nation-states."[270] It is important for this study that these officials are also claimants before authority on these issues. Accordingly the officials are restrained in both the decisions and the claims by the promise of reciprocity. As a result the authorized decision-maker reaches an appropriate compromise of competing claims through recognition, clarification and implementation of the widely-shared community interest. This produces objectivity in decision-making and yields sanction for the decision.[271]

Objectives

Authoritative decision-makers are established by the general community to achieve certain objectives. These objectives may be stated at different levels of abstraction. In its most abstract yet most fundamental form, the overriding objective is "the promotion of the fullest, conserving, peaceful use of the sea by all participants for achieving all their individual values in the greatest measure

possible."[272]

Three discernible subgoals appear in a less abstract form:

(1) secure the common interests of all participants in both inclusive uses and competences and exclusive uses and competences;

(2) reject all assertions of special interests, i.e., claims made irrespective of or against common interest; and

(3) maintain an economic -- and continually evolving -- balance between different common interests (whether inclusive or exclusive and whether relating to uses or competences) which conflict in particular contexts.

To achieve the first subgoal choices must be made. The desired preferences are made by balancing the common interests. This involves (1) preferring inclusive interests over exclusive interests; (2) conflicting inclusive interests are accommodated on the basis of reasonableness; and (3) exclusive interests are recognized and protected only when and to the degree the common good is better assisted thereby. Finally an objective common to all law is the promotion of stability in expectation of participants so that power will not be employed arbitrarily but only in relatively uniform patterns. That permits participants to pursue their objectives rationally, economically, peacefully and effectively.[273]

Arenas

The arenas in which decisions are made concerning the use of the oceans are (1) organized and unorganized, (2) external and internal to particular states, and (3) continuous and specially constituted. The traditional arenas wherein the law of the sea has evolved have been the unorganized, direct confrontations of officials and representatives of different states. However in the past several decades increasing use has been made by claimants of organized arenas, both specially constituted ad hoc conferences and permanent international institutions. In the area of pollution control in the territorial sea there have not been as many decisions made in arenas within particular states in contract to the many decisions affecting internal waters made with particular states.[274]

Unorganized

With regard to the United States claim to require financial responsibility, it would appear that decision may well be being made in the traditional unorganized arena since it does not appear to be current U.S. policy to apply the requirement to vessels in innocent passage[275] and there have been no public instances of foreign nations raising objections to the requirements.[276] Indeed as previously noted,[277] more than half the world's non-U.S. flag merchant vessels have complied.

The process of decision in the unorganized arena is apparently still underway regarding the Canadian claims to pollution control. The United States protested strongly the Arctic Waters Pollution Prevention Act and the extension of the Canadian territorial sea to 12 miles[278] and has protested to the drawing of fishing closing lines by Canada pursuant to the amended Territorial Sea and Fishing Zones Act.[279] Although it is understood that the Canadian government has drafted implementing regulations for the Arctic Waters Pollution Prevention Act,[280] over a year has passed since that Act was given Royal Assent[281] and the Act has not yet been proclaimed or regulations issued. Thus the U.S. protests have apparently acted effectively -- although perhaps only temporarily -- in the unorganized arena. In contract the British claim appears to have produced no protests.[282]

Organized

The type of claim exemplified by the U.S. financial responsibility requirements has been considered in the organized arena to date only at the ad hoc 1969 Brussels Conference on Marine Pollution Damage, where the claim was rejected by a sizeable majority of the nations voting.[283] The Canadian government has to date not accepted the United States proposal to hold an "international conference designed to establish rules for the Arctic beyond national jurisdiction

by international agreement."[284]

With regard to the general problem of oil pollution of the oceans, however, considerable authoritative decision has been and is being made in organized arenas.[285] The Intergovernmental Maritime Consultative Organization is the specialized agency of the U.S. primarily engaged in intelligence and recommending functions regarding oil pollution.[286]

In addition several ad hoc conferences have been and will be concerned with the problem. IMCO sponsored the aforementioned 1969 International Conference on Marine Pollution Damage[287] and is scheduled to hold in Brussels in December 1971 a diplomatic conference to adopt a convention establishing an international compensation fund for oil pollution damage supplementary to the Civil Liability Convention of 1969[288] and in 1973 another International Conference on Marine Pollution to prepare a convention restraining contamination of the marine environment by all vessels and equipment.[289] FAO sponsored a Technical Conference on Marine Pollution and its Effects on Living Resources and Fishing, Rome, 9-18 December, 1970, which heard many papers regarding oil pollution.[290] The General Assemply has approved the convening of a United Nations Conference on the Human Environment in Stockholm in mid-1972[291] and a general Law of the Sea Conference in 1973.[292] The problem of marine pollution

will be considered by both conferences[293] although it is not certain at this time the specific concerns of each conference with oil pollution.[294]

Bases of Power

The bases of power available to decision-makers in support of their authoritative determinations of the law of the sea embrace all the values normally at the disposal of states and international governmental organizations. The national officials, being the principal decision-makers in unorganized arenas, draw upon all the bases of effective power (controls over people, resources and institutional arrangements) of the states they represent. The decisions of international governmental organizations are sustained by grants of authority from states and by controls, varying in degree, over skills, enlightenment, well-being, loyalties, conceptions of rectitude, resources and even military forces. Increasing recognition by all peoples of their interdependences in the enjoyment of the oceans provides increasingly greater support for these bases of power of all these decision-makers.[295]

Strategies

The strategies by which decision-makers may manage

base values in support of decisions about the use of the oceans are the familiar policy instruments of diplomacy, ideology, economics and military force. They are used singly and in combination, with varying emphases, to induce conformity to the decisions by the carrot or the stick. National officials generally have broader freedom of choice of the particular instrument than do international organizations who generally are limited to the diplomatic and ideological strategies. However the considerations of reciprocity and potential retaliation under conditions of interdependence generally restrict the free choice of the national officials in their choice of strategies.[296]

Outcomes

The outcomes achieved by decision-makers in resolving controversies involve the seven functions used in the making and application of policy, intelligence, recommending, invoking, prescribing, applying, appraising and terminating. Note that all participants act in at least one if not all of these functions.[297]

Effects

The effects achieved by the decision-makers in compromising and accomodating the claims to authority correspond

in degree with the objectives sought. The internationalization of the oceans for all purposes decreases or increases as decision-makers honor and protect the many inclusive and exclusive claims. The fuller, peaceful rational use of the oceans is promoted or retarded as decision-makers succeed or fail to consider and weigh properly all the relevant factors to the most economic accomodation of the conflicting claims.[298] The previous descriptions of the development of the U.S. and Canadian claims apply illustrate domestic decision-makers failing to consider and weigh all the relevant factors to the most economic accomodation of the conflicting claims. The subsequent description of the evolution of the relevant international law regarding innocent passage and pollution control also demonstrates the same failure.[299]

Conditions and Situations

The conditions under which authoritative decision-makers prescribe and apply policy to claims to authority remains today grounded in the facts that (1) no central authority exists to make and apply policy, and (2) no state or group of states has the power necessary to enforce policy without uneconomic resort to violence. Therefore a common policy which recognizes and protects inclusive interests in the oceans requires for its continuance a sustained general consensus among the participants on what the policy should

be. States must therefore continue to recognize their community of interest and the conditions under which such a consensus can be maintained to preserve those common interests. Excessive claims for exclusive control which interfere with reasonable uses by others and violate long-established expectations about lawfulness can, if not decisively rejected, breed more extensive claims and yield disintegration of common authority and great loss of particular values of all claimants.[300]

There does not yet appear to have been accepted such a truly common policy with regard to this particular conflict or even with regard to marine pollution in general. Certainly one may hope that the 1972 Stockholm Conference on the Human Environment and the 1973 Law of the Sea Conference, aided by the continuing work of the various organizations previously mentioned,[301] will be able to promote such a policy. The chapter which follows and the concluding chapter of this study aim to assist in that effort.

CHAPTER IV

CLARIFICATION OF GOALS

It may well be that an authoritative decision has not yet been made on these coastal claims to require financial responsibility of foreign vessels passing through territorial seas. A juridical analysis of those claims may then perhaps be of some use to the decision-makers. Such an analysis can best be continued by clearly specifying the policy goals which any decision on those claims should support. This is a rational way of proceeding with an attempt to resolve the conflict. Just what then is it that a decision about conflicting uses of the oceans should attempt to achieve? What are the goals of such decisions?

Central to decisions regarding uses of the oceans is the "community interest in the continued maintenance of the highest possible degree of internationalization of the oceans" and the concomitant "common interest in an economic balance of exclusive and inclusive uses."[302] In the context here under study the common inclusive interest is in assuring full and efficient use of the oceans (freedom of passage) and the common exclusive interest is in permitting protection of coastal value processes (passage must be innocent, i.e., not offensive to certain coastal interests).[303] The goal of the decision maker is to accomodate these exclusive

and inclusive claims in a manner which produces the greatest production and widest possible sharing of values among all peoples at the least cost.[304]

This indeed is the goal for the following reasons: (1) Coastal states have a common interest in the exclusive claims to control in areas of the oceans adjacent to their coasts to protect their territorial base and organized social life and to take advantage of any unique riches of the ocean in their vicinity.[305] (2) All states, coastal and land-locked, have common interests in the fullest possible access to all the inclusive uses of the oceans.[306] That this is so particularly with regard to ocean commerce may be seen from the fact that in 1969 sixty of the more than 130 nations of the world each had a significant ocean-going merchant fleet[307] and 77 nations imported or exported by sea significant quantities of commercial commodities.[308] Indeed it has been said that almost all of the bulk raw materials in international trade is transported on the seas.[309] (3) Since all states have a mutual interest in all types of uses, each state has an interest in an accomodation of such uses when they conflict which will give both adequate protection to exclusive claims and the greatest possible access to inclusive uses. The maximization of inclusive uses is therefore dependent on restricting exclusive claims to the minimum reasonably necessary to the protection of

common interest.[310] The key then is reasonableness.

The factors relevant to an appraisal of the reasonableness of any claim include (1) the relationship between the claimed authority and the interests sought to be protected; (2) the nature and significance of the inclusive uses affected; and (3) the possible alternatives to securing the coastal interests.

Necessarily the reasonableness of both the coastal claims and the flag nation counterclaims should be examined. The coastal claims can be appraised in terms of (1) the extensiveness of the claim of authority asserted by the coastal state; (2) the areas subjected to that authority; (3) the interests the coastal state seeks to protect and promote; (4) the significance of those interests (a) between the claimants and (b) through time as to each claimant; and (5) the relationship between the authority claimed by the coastal state and the significance of the interests sought to be protected in terms of available alternatives. The flag nation counterclaims can similarly be appraised in terms of (1) the activity subjected to coastal authority (i.e., movement of passing vessels); (2) the intensity of that use by foreign flag vessels; (3) the location of that use; and (4) the significance of that use measured by (a) the strategic location of the territorial sea, (b) the available alternative routes, (c) the extent of interference, and (d)

any other special factors. The extent of interference may be separately examined to provide comparison of the competing claims. The degree of interference should be ascertained on the scale from complete incompatibility to minimal conflict. Finally the duration of the interference is of major significance due to the substantial differences between temporary and permanent assertions of authority.[311]

The main factors relevant to appraisal of the competing claims here under study appear then to be (1) the consequentiality and range of the interests sought to be protected by the coastal state, (2) the scope of authority claimed, (3) the importance of the area affected for inclusive use, (4) the intensity of the impact upon coastal interests, and (5) the alternative sanctions available for coastal protection.[312] Since coastal states do have a common and legitimate interest in protecting their wealth and well-being from the harmful effects of oil pollution and in obtaining compensation for damages caused by that pollution, that common interest may support the exercise of some exclusive claim to authority by coastal states. Indeed a policy which refuses to accomodate these coastal interests will be unlikely to diminish efforts by states to exercise control by such exclusive claims.[313] Further, a lack of accomodation can result in more extensive exclusive claims than otherwise might have occurred when such coastal states

become frustrated or completely dissatisfied with the functioning of international law in resolving contemporary problems.[314] Accordingly -- and this is the goal -- coastal states may exercise only that degree of exclusive competence which is reasonable and necessary to protect their wealth and well-being from the effects of oil pollution. To the extent that alternatives of inclusive competence exist which satisfy legitimate coastal interests, those alternatives are preferred.[315]

CHAPTER V

TRENDS IN DECISION

Innocent Passage and Pollution Control Territorial Sea Claims in International Law

Introduction

As previously explained,[316] a counterclaim of innocent passage is generally an expression of opposition to a particular coastal state claim of control in the territorial sea by maritime nations who are interested in maximum freedom of navigation for their ships. The international community has recognized both a right of innocent passage as a limiting feature on coastal control over foreign vessels in the territorial sea and has recognized coastal states' legitimate interests in pollution control in the territorial sea. Peaceful resolution of the opposing claims is the object of international law. Accordingly some relevant international law has developed in efforts to accomodate these claims. The history of development of that law follows in an effort to ascertain the present international law as an aid in resolving the conflict under study.

Customary International Law

Prior to 1969 there does not appear to have been any international consideration of coastal claims to require

financial responsibility for oil pollution of vessels engaged in passage through the territorial sea. However the general rights of innocent passage and coastal pollution control have been dealt with in varying degrees of detail during this century.

Although the general right of innocent passage was noted early,[317] only at the 1930 Hague Codification Conference was an attempt made to spell out some of the details of this right. Perhaps because these prior references were so slim, the formal preparatory work for the 1930 Hague Conference itself only had vague references to innocent passage.

1930 Hague Codification Conference

General Definition of Innocent Passage

Replies to Inquiries

The replies by states to the Preparatory Committee's inquiries about the regime of the territorial sea[318] did not produce very elaborate definitions of innocent passage. Those replies[319] spoke of the presence of goods or persons aboard vessels in the territorial sea which might be a source of danger or prejudicial to the "safety, good order, or revenues"[320] of the coastal states, or in more general terms conveying the same idea.[321] Not surprisingly the Observations derived from these replies also stated very

little specific about the content of the right of innocent passage.[322]

Basis of Discussion No. 19

Basis of Discussion No. 19 prepared from this Observation and these replies provided only that merchant vessels must be allowed a right of innocent passage through territorial waters and that "any police or navigation regulations with which such ships may be required to comply must be applied in such a manner as to respect the right of passage and without discrimination."[323] This right of innocent passage was to include both persons and goods aboard ships and to comprise "anchoring so far as is necessary for purposes of navigation."[324]

British Recommendations

The Conference did however produce some concrete proposals for content to that right of innocent passage, based primarily on suggestions of the British delegation. The British recommendation was

> A passage is not innocent if the ship makes use of the territorial waters of the coastal State for any purpose prejudicial to the safety, good order, or revenues of the coastal State.[325]

This recommendation was expanded in the further British recommendation that

> A coastal State may require foreign ships exercising the right of innocent passage to comply with such regulations as may be prescribed by local law:

. . . .

> (b) For the protection of the waters of the coastal State from oil and ships' refuse. . . .[326]

Final Act

The provision ultimately adopted by the Conference was quite similar to the original British general proposal:

> Passage is not innocent when a vessel makes use of the territorial sea of a Coastal State for the purpose of doing any act prejudicial to the security, to the public policy or to the fiscal interests of that State.[327]

Although one cannot ascertain the reasons for the changes in language, it would appear their purpose was to widen the competence of the coastal state to qualify passage as non-innocent as may be seen from the comparative chart of the British proposal and the language finally adopted:

British proposal	Article 3, Final Act
. . .	. . .
for any purpose	for the purpose of doing any act
prejudicial to the security, good order, or revenues of the coastal State.	prejudicial to the security to the public policy or to the fiscal interests of that State.

In particular, one may properly assume that a coastal State could not, under Article 3 of the Final Act of the Conference regarding Territorial Sea, deem passage non-innocent until an act deemed prejudicial to coastal interests has

been performed, and a mere purpose to use the territorial sea in a prejudicial way without an accompanying prejudicial act would not be sufficient.[328]

One may also note the extreme discretion with which the coastal state is invested by the formula of the Final Act containing such general words as "public policy," "security," and "fiscal interests."

Pollution Control

The British proposal regarding pollution control is set forth on the preceding page. Its detail was adopted in somewhat different language:

> Foreign vessels exercising the right of passage shall comply with the laws and regulations enacted in conformity with international usage by the Coastal State, and, in particular, as regards:
>
> . . . .
>
> (b) the protection of the waters of the Coastal State against pollution of any kind caused by vessels. . . .[329]

The pertinent differences in language may be seen from the following chart:

British proposal	Article 3, Final Act
A Coastal State may require foreign ships exercising the right of innocent passage to comply with such regulations as may be prescribed by local law:	Foreign vessels exercising the right of passage shall comply with the laws and regulations enacted in conformity with international usage by the Coastal State, and, in particular as regards

. . . .	. . . .
(b) for the protection of the waters of the Coastal State from oil and ships' refuse. . . .	(b) the protection of waters of the Coastal State against pollution of any kind caused by vessels. . . .

Analysis

One may take particular note of certain significant provisions of the Final Act above quoted. First and foremost to be noted is the clear consensus[330] "that the coastal state was not considered to be free at its discretion to require compliance with any regulation it might feel inclined to enact."[331] On the contrary, foreign vessels were required to comply with laws and regulations "enacted in conformity with international usage by the Coastal State."[332] Therefore, "a criterion of usage in the community determined the scope of coastal authority to protect its interests."[333]

Secondly, subsection (b) of Article 6 specifies as a particular matter subject to coastal state regulation "pollution of any kind caused by vessels." The Observations to this article state that this is one of the "principle powers which international law has hitherto recognized as belonging to the Coastal State for this purpose" and "the term 'enacted' must be understood in the sense that the laws and regulations are to be duly promulgated."[334] Therefore one finds here an early positive recognition of coastal state competence to regulate pollution in its territorial sea by vessels engaged in passage. The specifics and limits of that competence are however not detailed and barely suggested.

Further matter mentioned in the Observations to Article 6 must be mentioned. That Observation states flatly "vessels infringing the laws and regulations which have been properly enacted are clearly amenable to the courts of the Coastal State."[335] This statement raises the question whether every violation of coastal regulations makes an otherwise innocent passage non-innocent. Certainly "subjection of ships to judicial proceedings could be a much more severe interference with the interests of other states than simple exclusion from access."[336] For if innocent passage is to be considered as an effective right of access free from serious interference by the coastal state, application of severe sanctions by a coastal state is incompatible with that concept of innocent passage. However the current view, as embodied in the 1958 Convention on the Territorial Sea distinguishes between "violations of coastal law that justify consideration of passage as non-innocent and subject to exclusion, and violations that do not make passage non-innocent but which still warrant other application of coastal authority."[337] Recognition of this aspect of the problem brings to mind the necessity to consider the alternatives available to the coastal state in enforcing its pollution control regulations and in judging the appropriateness of sanctions.

International Law Commission Efforts

The International Law Commission (ILC) addressed the question of innocent passage during certain of its deliberations preceding the 1958 Law of the Sea Conference. The efforts spent during the ILC meetings dealing with innocent passage were in part directed to "make detailed specification both of the general interests that the coastal state is entitled to protect in its territorial sea and of the specific regulations it may impose upon passing vessels."[338] The general definition of innocent passage put forward by the 1930 Hague Conference was greatly altered by the ILC. Further, certain Commission members "sought to avoid any effort to provide, by means of a specification of coastal authority to prescribe regulations concerning passage, any concrete guidance for decisions with respect to innocent passage."[339]

General Definition of Innocent Passage

1954 Session

Under consideration by the ILC when the subject of the regime of the territorial sea was first considered was the proposed definition drafted by the Special Rapporteur, Mr. Francois. It read as follows:

> Article 14. Meaning of the Right of Passage
>
> 1. "Passage" means navigation through the territorial sea for the purpose either of traversing that sea without entering inland

> waters, or of proceeding to inland waters, or of making for the high sea from inland waters.
>
> 2. Passage is not innocent when a vessel makes use of the territorial sea of a coastal State for the purpose of doing any act prejudicial to the security, to the public policy or to the fiscal interests of that State.
>
> 3. Passage includes stopping and anchoring, but in so far only as the same are incidental to ordinary navigation or are rendered necessary by force majeure or by distress.[340]

This proposal was first discussed at the Sixth Session (1954) of the ILC.[341] McDougal and Burke accurately summarize that discussion:

> . . . some members expressed considerable dissatisfaction with the formulation of "security, public policy or fiscal interests" . . . In particular, the words "public policy" were regarded as much too vague and as permitting an almost unlimited discretion in the coastal state to qualify passage as non-innocent. On the other hand, "fiscal interests" was regarded as referring to rather unimportant concerns of the coastal state. . . .[342]

The definition initially adopted by the ILC was in the form recommended by the Rapporteur except that paragraph 2 was amended to read:

> Passage is not innocent when a vessel makes use of the territorial sea of a coastal State for the purpose of doing any act prejudicial to the security or public policy of that State or to such of its interests as the territorial sea is intended to protect. /Emphasis indicates substantive changes./[343]

As may be readily seen reference to fiscal interests was dropped by the ILC and a coastal-state-oriented clause added.

1955 Session

The ILC initial formulation received wide reaction from governments resulting in the Special Rapporteur redrafting the article. He renumbered it article 17. It read:

> Article 17. Meaning of the right of innocent passage
>
> 1. Vessels of all States shall enjoy the right of innocent passage through the territorial sea.
>
> 2. Passage means navigation through the territorial sea for the purpose either of traversing that sea without entering inland waters, or of proceeding to inland waters, or of making for the high sea from inland waters.
>
> 3. Passage is innocent so long as the vessel uses the territorial sea without committing any act contrary to the present rules.
>
> 4. Passage includes stopping and anchoring, but in so far only as the same are incidental to ordinary navigation or are rendered necessary by force majeure or by distress.[344]

This new proposal by the Special Rapporteur was criticized at the Seventh Session (1955) of the ILC as too vague and for leaving too much control over passage in the hands of the coastal state.[345] As a result the article was again modified, ultimately[346] to read:

> Article 17.
>
> 1. Subject to the present regulations, vessels of all States shall enjoy the right of innocent passage through the territorial sea.
>
> 2. Passage means navigation through the territorial sea for the purpose either of traversing that sea without entering inland waters, or of proceeding to inland waters, of of making for the high sea from inland waters.

> 3. Passage is innocent so long as the vessel does not use the territorial sea for committing any acts prejudicial to the security of the coastal State or contrary to the present rules or to other rules of international law.
>
> 4. Passage includes stopping and anchoring, but in so far only as the same are incidental to ordinary navigation or are rendered necessary by force majeure or by distress.[347]

This formulation is substantially the provisions of the draft article 15 approved by the ILC.[348]

The result of this drafting is that security was the only explicity mentioned interest with which passage would have to comply to remain innocent. The 1930 Hague Convention proposal regarding abiding by coastal state pollution prevention laws and regulations was deleted from the article on general definition. It was first moved to another draft article and then relegated to the commentary to that article.[349]

In summary to 1956, there was some specification of the coastal state's legitimate interests to exercise authority over the passage of foreign ships in its territorial sea. Until 1956 there was even seeming consensus on this question both of the details of the right and no disagreement about the purpose of the listing, namely to provide a more "precise" definition of innocent passage.[350]

As evident from the above descriptions, the general definition of innocent passage to 1956 is rather abstract. The major purpose of that abstractness is said to have been

"to narrow coastal authority over passage."[351] During the final session of the IIC devoted to the articles on the law of the sea, the Eighth, the IIC made major changes in the provisions of the articles dealing with the general definition of passage and the duties of foreign vessels during passage.

1956 Session

During this Eighth Session the members of the IIC simply could not agree on the scope of coastal authority over passage.[352] Unsuccessful efforts were made to include specification of items beyond "security" which could be considered prejudicial activities. In the end, article 16 was adopted with only a few minor changes.[353]

As adopted by the IIC in its final report, article 16 was renumbered article 15. It read:

> Article 15. Meaning of the right of innocent passage
>
> 1. Subject to the provisions of the present rules, ships of all States shall enjoy the right of innocent passage through the territorial sea.
>
> 2. Passage means navigation through the territorial sea for the purpose either of traversing that sea without entering internal waters, or of proceeding to internal waters, or of making for the high seas from internal waters.
>
> 3. Passage is innocent so long as a ship does not use the territorial sea for committing any acts prejudicial to the security of the coastal State or contrary to the present rules, or to other rules of international law.

> 4. Passage includes stopping and anchoring, but only in so far as the same are incidental to ordinary navigation or are rendered necessary by force majeure or by distress.
>
> 5. Submarines are required to navigate on the surface.[354]

Pollution control

1954 Session

The Special Rapporteur placed the pollution control authority in article 17 of his original proposal. It was identical to article 6 of the 1930 Convention's Final Act previously quoted.[355] This proposal became article 21 when under consideration at the Sixth Session of the ILC,[356] since it had been moved to the subsection relating to rules applicable to vessels other than warships. The provision had previously been in the general definitional section of rights of passage.

Paragraph 1 of this article was amended during this session of the ILC, not with regard to the specific examples, but by replacing "international usage by the coastal State" with the words "these regulations and other rules of international law."[357]

The commentary to article 21 states:

> International law has long recognized the right of the coastal State to enact in the general interest of navigation special regulations applicable to vessels exercising the right of innocent passage through the territorial sea. The principle powers which international law has hitherto recognized as belonging to the coastal State for this purpose are defined in this article.[358]

1955 Session

Article 21 was renumbered 20 during the Seventh Session of the ILC in 1955. It was adopted unanimously without discussion.[359] The comment to this article stated that the "list . . . is not exhaustive of regulations enacted by the coastal State with which foreign vessels must comply during their passage . . ."[360] The article itself was returned from a subsidiary subsection to the first section containing the general rules. The article has remained in that first section of the Convention.

1956 Session

The discussion of the ILC during its Eighth session in 1956 of the duties of foreign vessels during their passage[361] centered around the listing of coastal laws with which the foreign vessel in passage must comply. Attempts were made to add items to the list.[362] That produced an extended discussion on the merits and demerits of having any list at all and resulted in the compromise of a general requirement of the foreign vessel to comply coupled with the listing being placed in the commentary.[363]

It is reasonably clear from a reading of these discussions that at no time did any of the members of the ILC intend to imply by this action that the coastal state lacked authority to make pollution control laws or that international

law did not require the foreign vessel to comply with them so long as those rules were otherwise in conformity with international law. Unfortunately, but not surprisingly, none of the discussion dealt with any criteria by which to judge the validity under international law of any particular coastal state's pollution control laws or regulations. It is clear however that the coastal state did not have blanket authority to legislate and regulate.[364]

In any event the article was again revised to reflect these changes and the commentary was expanded to include the examples. In redrafting the article was renumbered article 18. The final draft of article 18 then read:

> Article 18. Duties of foreign ships during their passage
>
> Foreign ships exercising the right of innocent passage shall comply with the laws and regulations enacted by the coastal State in conformity with the present rules and other rules of international law and, in particular, with the laws and regulations relating to transport and navigation.

The commentary to this article read:

> Commentary
>
> (1) International law has long recognized the right of the coastal State to enact, in the general interest of navigation, special regulations applicable to ships exercising the right of passage through the territorial sea.
>
> (2) Ships entering the territorial sea of a foreign State remain under the jurisdiction of the flag State. Nevertheless, the fact that they are in waters under the sovereignty of another state imposes some limitation on the exercise of the exclusive jurisdict on of the flag State. Such ships must comply with

> the laws and regulations enacted by the coastal State in conformity with the present rules and other rules of international law and, in particular, with the laws and regulations relating to transport and navigation. At its seventh session, the Commission thought it useful to give the following examples:
>
> . . . .
>
> (b) The protection of the waters of the coastal State against pollution of any kind caused by ships;
>
> . . . .
>
> (3) . . . The Commission considered that such a list, which could not be exhaustive, would be somewhat arbitrary and preferred to mention these cases in the commentary without including them in the body of the article.[365]

A careful examination of this language reveals that the substance of it previously appeared in the Commission's report on this article.

This article was ultimately adopted verbatim as article 17 of the Convention on the Territorial Sea and the Contiguous Zone. It appears in the subsection containing rules applicable to all ships. Unfortunately the commentary was deleted entirely from the Convention.

Before turning to a consideration of the relevant work of the 1958 Geneva Conference on the Law of the Sea, one final matter regarding the ILC's efforts should be mentioned. As noted previously, one must examine the question of the relation between innocent passage and adherence to coastal laws and the protection of the latter by prohibiting

passage as non-innocent. Although the comments of one member of the Commission appears to indicate that these concepts are separable and distinct,[366] that view is clearly rejected by the ILC in its commentary to article 15 dealing with the meaning of the right of passage:

> (3) For the right in question to be claimable, passage must in fact be innocent. It will not be innocent if the ship commits any of the acts referred to in paragraph three. . . . /T/he more general expression in paragraph three . . . covers, inter alia, questions relating to customs and health as well as the interests enumerated in the comment to article 18 /duties of foreign ships in passage/.[367]

It therefore appears that the ILC felt that a coastal state had the authority to prohibit passage of a ship in violation of its pollution control laws, presuming that those laws or regulations were themselves consonant with international law.

Conventional International Law

1958 Geneva Conference on the Law of the Sea

General Definition of Innocent Passage

McDougal and Burke properly identify the three principle controversies at the 1958 Conference regarding definition of innocent passage as involving (1) "the provision for a general definition of innocent passage," (2) "the desire to provide that prohibition of passage as non-innocent was separate from requiring conformity with coastal laws and

regulations," and (3) "the deletion of the reference to 'other rules of international law' as a condition for innocent passage."[368] Resolution of the controversies at the Conference however provides little guidance to the specifics of coastal state authority regarding pollution control. Nevertheless a statement of the resolution is helpful at least to maintain perspective as to the meaning of the results of the conference.

With regard to the first question, the First Committee and later the Conference adopted as a general definition "Passage is innocent so long as it is not prejudicial to the peace, good order or security of the coastal State."[369] This language was adopted as a compromise between the extreme positions put forth favoring flag nations (only "security") and coastal states (simple "interests") for competence of the coastal state.

The second question involved attempts to distinguish coastal state competence to prohibit passage as non-innocent and coastal competence to prescribe regulations to which passing vessels must comply.[370] The problem is the same as adverted to previously: whether the sanction of prohibition of passage may be applied by the coastal state to any violations of its laws and regulations. If the concepts are separate, the implication is that the coastal state may not prohibit passage as non-innocent in sanction for violation of its rules. "This conclusion needs mere statement

to provide its own refutation."[371] McDougal and Burke conclude that "the object of the distinction . . . was to differentiate the sanctions available to the coastal state for protection of its interests."[372] This differentiation is stated as follows:

> For violation of coastal prescriptions (whether executive, legislative, administrative, or whatever) relating to interests broadly formulated as "peace, good order or security," [article 14 paragraph 4] the coastal state would be competent to prohibit passage as non-innocent.
>
> For failure to comply with other coastal laws [article 17], however, passing vessels could not be excluded from the territorial sea, but they could be subjected to other forms of coastal authority.[373]

As acknowledged by McDougal and Burke, this interpretation is not based on any such distinction apparent on the face of the articles but is supported by testimony of the participants that this was their objective.[374]

The third controversy at the 1958 Conference related to attempts to eliminate reference to "other rules of international law" in the definition of innocent passage in the ILC article 15 paragraph 3.[375] It too was ultimately retained as part of the second sentence of article 14 paragraph 4 and appears to be part of the same dichotomy just discussed. However, McDougal and Burke appear to analyze the situation correctly as simply

> to indicate that violation of international law prescriptions protecting lesser interests does not deprive passage of its innocent character. On the other hand, infringement of

> more fundamental prescriptions, such as those of the United Nations Charter, would clearly justify prohibition of passage as non-innocent.[376]

It should also be noted that the Conference deleted the ILC's phrase "a ship does not use the territorial sea for committing any acts,"[377] on the proposal of the United States[378] since it was "considered to be ambiguous."[379] Ambassador Dean simply stated his delegation "favored a more general formulation, and did not believe it was necessary to mention the kind of acts that rendered passage no longer innocent."[380] The "aim of his amendment" was to make the "provision as unambiguous as possible" since "the right of innocent passage was so important."[381] As stated by McDougal and Burke, the result of that amendment is that

> Convention Article 14(4) no longer restricts coastal competence to prohibit passage to considerations arising from incidents occurring in the territorial sea. It is now open to the coastal state to take other factors into account, including, for example, the purpose of the projected passage, the cargo carried, and destination in a third state.[382]

Pollution Control

Great Britain proposed an amendment to article 18, duties of foreign ships during passage, to include specific reference to pollution control:

> Delete "in conformity with the present rules and other rules of international law and, in particular, with the laws and regulations relating to transport and navigation" and substitute "to secure the safety of navigation through the territorial sea, the protection of channels and buoys and the prevention

> of pollution, provided these are in conformity with international law.[383]

It is evident that this amendment had its antecedents in the British proposals at the 1930 Hague Codification Conference.

This amendment, unfortunately, was discussed only once in the First Committee, at the 27th meeting[384] when Sir Gerald Fitzmaurice of the British delegation stated the reasons for their amendment:

> At one state, the Commission had inserted in its draft an enumeration of the types of laws and regulations applicable but had later modified the text on the ground that it might fail to be exhaustive. His delegation considered that in fact only laws and regulations pertaining to the matters in its second amendment /quoted above/ were really applicable, so that such a text would make for greater precision.[385]

No further discussion of this amendment was held at that meeting. This article was next discussed at the 33rd meeting but it was not dealt with substantively. The concern was with a Mexican proposed amendment which would have required the ship's passage to be in conformity with international law as well as with coastal state laws and regulations which themselves would not be expressly subject to international law. Considerable opposition to this Mexican proposal was naturally expressed. At the 34th meeting that proposal was first adopted[386] and then rejected on a vote on the whole of article 18.[387] Thereafter at the 36th meeting the original Commission proposal for this article was adopted

unanimously.[388]

Therefore by a procedural maneuver in which the British proposal was never really discussed and never came to a vote -- and apparently was never formally withdrawn -- the ILC's formulation of coastal states' right to impose laws and regulations on foreign vessels was adopted. There are no comments to the convention's articles as with the ILC's, and thus there is no explicit statement that pollution control is within the scope of coastal state authority under international law to regulate as against foreign vessels in passage. Nevertheless the summary records of the First Committee of the 1958 Geneva Conference on the Law of the Sea do not indicate that there was any rejection of the ILC's comments as stated by Sir Fitzmaurice.

International Conference on Marine Pollution Damage, 1969

There is no international convention which specifically gives a coastal state a right to make a unilateral requirement of financial responsibility a prerequisite to passage through the territorial sea. The specific subject of financial responsibility is of very recent vintage in this context and was not discussed at or prior to the 1958 Geneva Conference.[389] Perhaps the first international consideration of this question in formal conference was during the International Legal Conference on Marine Pollution Damage, 1969 held in Brussels under the auspices of IMCO.

This claim was considered in the context of the drafting of the International Convention on Civil Liability for Oil Pollution Damage[390] which was being handled by the Committee of the Whole II. The pertinent draft articles under consideration at that time read as follows:

Article III

. . . .

12. A Contracting State shall not permit a ship under its flag to which this Article applies to trade unless a certificate has been issued under paragraphs 2 and 14 of this Article.

13. Subject to the provisions of this Article, each Contracting States shall ensure, under its national legislation, that insurance or other security to the extent specified in paragraph 1 of this Article is maintained in respect of any ship, where ever registered, entering or leaving a port in its territory, or approaching, or leaving an off-shore terminal in its territorial waters, if the ship carried more than 2,000 tons of oil in bulk as cargo.[391]

With minor amendments this language was ultimately adopted and signed as part of Article VII, paragraphs 10 and 11, of the Civil Liability Convention.[392] However, during one of the last meetings of the Committee of the Whole II, an amendment was offered which would have specifically permitted states to require certificates of financial responsibility of ships engaged in innocent passage.

This proposed amendment read:

13bis. A Contracting State may require, under its national legislation, that insurance or other security to the extent specified in paragraph 1 of this Article

> is maintained in respect of any ship, wherever registered, passing through its territorial waters (both internal waters and territorial sea).[393]

This amendment was proposed and supported primarily by coastal states without a large maritime fleet. Spain, France and Italy alone of the 15 largest merchant fleet nations[394] supported the proposal which was introduced by them.[395]

The arguments in favor of the proposal were:

(1) "to increase the protection afforded to coastal States, which at present were inadequate since nothing was said about potentially dangerous ships not necessarily arriving at the port of a coastal State but passing through its territorial waters."[396]

(2) "The amendment did not place any obligation on the coastal State; it merely allowed it an option."[397]

(3) "The proposal was entirely compatible with existing international law. . . . With regard to the right of innocent passage, paragraph 5 of Article 14 of the 1958 Geneva Convention on the territorial sea allowed the coastal State to make and publish laws and regulations concerning foreign fishing vessels in the territorial sea. The intention of the amendment was not to impose a unilateral law or to give a blank cheque to any State to stop tankers. His delegation /Spain/ only wanted what was compatible with international legislation and was anxious that the provision of the Convention should be complied with."[398]

(4) It was acceptable to apply the paragraph "only to ships carrying more than 2,000 tons of oil."[399]

Opposition to the amendment was expressed by countries with the largest merchant fleet and was expressed in terms of the right of innocent passage. The delegate from the Netherlands stated:

> He did not understand how it could be possible to control ships passing through the territorial sea except by stopping and boarding them, and that would be a contravention of international law. A coastal State could not hinder the innocent passage of a ship. Sanctions could be imposed only in the ports visited, not during innocent passage.[400]

Lord Devlin from Great Britain was even more emphatic:

> If the amendment was intended to cover international /internal/ waters his delegation could accept it; but if it was meant to apply to the territorial sea, they had no doubt that it conflicted with the provisions of the 1958 Geneva Convention, which states quite categorically that a coastal State must not hamper the innocent passage of a ship through its territorial sea.[401]

The United States chief delegate, Mr. Neuman "stated he sympathized with the aims of the movers of the amendment but shared the concern of those who had spoken about the serious effect it could have on the right of innocent passage. If included in the Convention, it could prevent its ratification."[402] The delegate from the Soviet Union stated flatly that "there was a universally recognized principle of international law regarding the innocent passage of ships, and the amendment conflicted with that principle."[403]

The coastal states won this battle in committee but lost the war in plenary session. The vote in committee was 19 in favor, 17 against with seven abstentions,[404] with 11 of the largest merchant fleet nations not able to persuade the coastal states.

This amendment was thereupon referred along with the rest of this draft of the Civil Liability Convention to a Drafting Group. That Group reported out this amendment as paragraph 12 of a renumbered Article VII.[405] Perhaps fortuitiously, the Drafting Group did not add what was meant by "territorial waters" to this paragraph as had been added in the early discussion in committee.

On the last day of the conference, November 27, 1969, during final voting on this convention, the United States called for a separate vote on this paragraph 12. The maritime nations won this time. Only 13 states voted in favor of the amendment, 24 voted against it, and seven nations again abstained.[406]

What then does one make of this? The amendment would have recognized the right of a coastal state to impose on ships engaged in passage without stopping through the territorial sea a requirement that they have certificates of financial responsibility (or the equivalent) even if they had no intention of making for a port or otherwise passing through the internal waters of the coastal state. The amendment would have recognized as valid what the United States

has done in section 11(p)(1) of the WQIA and its implementating regulations and the Canadian government claims the right to do in Arctic shipping safety control zones.

However this proposal was defeated in plenary session of the conference by almost a two-to-one vote. It seems fair to assume, since the record of any roll call vote is not available, that many of the coastal states which had originally joined with France and Spain switched sides.[407] The inference may then perhaps fairly be drawn that the international community represented at the IMCO conference does not now -- or yet -- recognize that method of coastal state protection as valid indernational law. It is clear that the arguments made on both sides with reference to the 1958 Territorial Sea Convention do not reveal any real understanding of where the pollution control authority is based in that convention, not even by the British delegate whose government had been previously the strongest claimant for express recognition of that specific coastal state authority.

Evaluation of Existing Regime

That then appears to be the state of the international law of innocent passage as it related to coastal state authority to exercise pollution control in the territorial sea. In summary both customary and conventional international law recognize that the coastal state has competence to exercise some measure of pollution control in the territorial sea which may properly restrict a foreign vessel in the use of

the territorial sea. It is equally clear that the parameters of that coastal state right are neither fixed nor even staked. The subject of specific kinds of coastal claims to oil pollution control in the territorial sea are simply too recent a development for the international community to have developed any rules. The only known international consideration of a particular attempt to authorize coastal states to require oil tankers to have proof of financial responsibility as a condition of entry into territorial sea for purposes of passage through those waters rejected that claim as contrary to the flag states' interests in freedom of the seas.

Further a majority of the non-U.S. flag merchant vessels have, without protest, complied with the only implemented coastal claim to require financial responsibility for oil pollution damage.[408] The reason(s) for such compliance are unknown. It may be that all those vessels are expected at some time to enter U.S. ports.[408a] Or it may be that the vessel owners did not want to "fight about it." Nevertheless, such shipowners may be more reluctant to comply with future financial responsibility requirements of other nations -- particularly if the limits of liability or the theory and nature of liability differ in each or even a small number of the some 126 coastal states and islands of the world today.

International Regulation of Oil Pollution in General

International regulation of oil pollution became possible only many years after national legislation was enacted

and found not to be totally effective.[409] This international regulation has been traditionally limited to control in the high seas only. The first international convention to come into force was the 1954 Oil Pollution Prevention Convention.[410] This convention set up prohibited areas of the high seas but contained no effective enforcement provisions. It relied on legislation of the flag state to punish violators even though flag state legislation was quite varied in its effectiveness.

This convention was amended in 1962 to bring more ships under its regulation and also expanded the prohibited areas.[411] But the amendments did not include any effective enforcement provisions.

Given impetus by the Torrey Canyon disaster,[412] IMCO[413] sponsored the International Legal Conference on Marine Pollution Damage held in Brussels during November 1969. This conference adopted amendments to the 1954 Oil Pollution Prevention Convention prohibiting all intentional discharges of oil on the high seas.[414] However the amendments do not add any effective enforcement provisions, leaving enforcement with the flag state. The conference also produced two conventions, one designed to authorize and control coastal state intervention on the high seas to abate oil pollution from damaged ships.[415] The other convention set up an international scheme to regulate the civil liability of tanker owners for oil pollution damage to public and private coastal interests. That convention included a scheme to provide some compensation

to victims of oil pollution.[416]

The Civil Liability Convention requires each owner of a ship carrying more than 2,000 tons of oil in bulk to maintain insurance or other financial responsibility in an amount equal to the limit of his liability.[417] Certification of compliance with this financial responsibility requirement lies with the flag state.[418] Enforcement of this provision is unusually effective: no state may permit such a ship under its flag to trade unless it has such a certificate,[419] and

> Subject to the provisions of this Article /VII/, each Contracting State shall ensure, under its national legislation, that insurance or other security to the extent specified in paragraph 1 of this Article is in force in respect of <u>any ship, wherever registered</u>, entering or leaving a port in its territory, or arriving at or leaving an offshore terminal in its territorial sea, if the ship actually carries more than 2,000 tons of oil in bulk.[420]

Thus enforcement occurs during the normal customs clearance procedure.

Pursuant to a Conference resolution,[421] Draft Articles for an International Convention on the Establishment of an International Fund, funded by a levy on oil carried as cargo at sea, for the supplementary compensation of oil pollution damage to a total of $30 to $60 million beyond a polluting vessel's liability under the Civil Liability Convention, have been drafted by the IMCO Legal Committee.[422] The Fund would also indemnify shipowners for liability under the Civil

Liability Convention between a minimum amount, proposed as the 1957 Brussels Limitation of Liability Convention[423] amount of $67 per ton/maximum of $7 million, and the maximum amount under the Civil Liability Convention of $34 per ton, maximum of $14 million.[424] A two-to-three week diplomatic conference to adopt this convention is currently scheduled to begin November 29, 1971 in Brussels.[425]

Private Transnational Efforts at Compensation

Industry-sponsored insurance efforts have recently flourished -- or become visible.[426] Placed into effect recently are cooperative insurance schemes by tanker owners (TOVALOP),[427] bulk oil cargo owners (CRISTAL)[428] and owners of offshore and onshore oil facilities (O.I.L.).[429] CRISTAL alone is specifically designed to fill a part of the insurance gap until the international compensation fund is established.

TOVALOP is a voluntary plan intended to encourage immediate action be members to clean up pollution resulting from a negligent discharge of oil from a member's tanker (regardless of the degree of fault). The agreement is in full force with the owners of more than 80% of the tanker tonnage participating in the plan.[430] Under this plan national governments -- but not private persons -- can be reimbursed, up to a maximum of $100 per gross ton of the

tanker discharging the oil or $10 million whichever is lesser, for reasonable and voluntary prevention or clean up expenses incurred. The tanker owner is encouraged to act quickly to clean up, since he may recover from the fund his reasonable clean up costs. Clean up by a national government of private beaches is reimbursable by the fund. The tanker owner carries the burden of disproving negligence. TOVALOP does not cover fire or explosion, consequential or ecological damage. The plan began January 7, 1969 for an initial term of five years, renewable for successive two five year terms.[431]

CRISTAL is an interim voluntary insurance plan that will provide compensation to third-party victims not eligible for compensation under TOVALOP who are damaged by oil pollution from a sea-going tanker covered by TOVALOP. CRISTAL went into effect April 1, 1971 after petroleum companies representing ownership of 80% of the world's crude and fuel oil carried in tankers covered by TOVALOP signed the agreement.[432] CRISTAL will remain in operation until the International Fund for the Compensation of Oil Pollution Damage Supplementary to the Civil Liability Convention comes into operation. CRISTAL will also terminate if TOVALOP terminates before the Civil Liability Convention comes into force, or if the Civil Liability Convention does not come into force by April 1, 1976.[433] Under CRISTAL $30 million is the maximum compensation per single incident, including amounts paid under TOVALOP, existing law or any other funds paid to cover

the costs of the incident.[434]

International Efforts in General

The North Atlantic Treaty Organization (NATO) Committee on the Challenges of Modern Society (CCMS) convened in November 1970 at Brussels, Belgium a conference on Pollution of the Sea by Oil Spills.[435] There it was recognized that the NATO nations were uniquely involved in the problems caused by intentional and accidental oil spills because they control under their flag or through their nationals about 75% of the tanker tonnage of the world and because more than 70% of the world's annual oil production enters their coastal areas and ports.[436] At the urging of the United States,[437] the conference resolved "to achieve by mid-decade the elimination of intentional discharges of oil and oily wastes into the sea and the minimuzation of accidental spills."[438] The December 1970 NATO Ministerial Meeting approved, based on this conference's actions, in which the NATO nations resolved "to start work at once in order to achieve by 1975 if possible but not later than the end of the decade, the elimination of intentional discharges of oil and oily wastes into the sea.[439] This meeting also produced resolution to support and accelerate work in IMCO with a view to achieving the policy objective.[440]

As previously noted,[441] in June 1972, there will be a U.N. Law of the Sea Conference. To date the jurisdiction of

these conferences with regard to pollution prevention and control has not been determined.[442]

Oil Pollution Prevention and Control Techniques

Introduction

There is a growing recognition that the problem of oil spills can only be solved by preventing oil spills from occurring in the first place and minimizing the harm of the spills when they occur. The 1926 Intergovernmental Conference of Maritime Nations held in Washington, D. C. was split on the necessity for complete prohibition of all discharged of oil into the oceans.[443] The 1926 International Shipping Conference, made up of private ship owner organizations, did produce a cooperative agreement to refrain from discharging oily waters within 50 miles of any coast.[444] That remains the standard rule in force today.[445] The efforts of the League of Nations between 1934 and 1936 were inconclusive.[446] The 1954 International Conference on Pollution of the Sea by Oil recognized that "the only entirely effective method of preventing oil pollution is the complete avoidance of the discharge of persistent oils into the sea . . ."[447] A very recent statement of a political scientist is quite explicit: "the only way to successfully manage /sic/ oil spills is to protect them."[448] The industry agrees: The real key area in avoiding pollution of the seas is competent,

prudent seamanship. It is a question of disciplined and well trained crews. It is a question of crews and masters who are responsive to the direction of top management in the companies."[449]

As is well known neither that conference nor subsequent efforts have achieved the desired result. However the more recent and on-going efforts are significant and forceful evidence that such a goal may well be achieved. Some knowledge of these efforts as viable alternatives is necessary to a realistic appraisal of the coastal claims to financial responsibility, particularly where the objectives of those claims is to reduce or eliminate in the first place oil spills in the oceans as opposed to a more limited and direct objective of insuring compensation for damages caused by oil spills. A sampling of these efforts is set forth in the sections of this chapter which follows.

IMCO

The Intergovernmental Maritime Consultative Organization came into formal existence March 17, 1958.[450] Among other functions, IMCO provides a forum for continuing exchange among the world's maritime safety administrations. It conducted the 1960 Conference on the Safety of Life at Sea,[451] and the 1962 Conference which produced amendments to the 1954 Oil Pollution Prevention Convention.[452] A brief description of the structure and operation of IMCO will be helpful to understand the nature and status of the work of IMCO.

The main body of IMCO is the Assembly in regular session every two years. The administrative body of IMCO is the Council, composed of 18 states, which usually meets twice a year. Subordinate to the Council are three committees: Legal, Facilitation and Maritime Safety. The Maritime Safety Committee is the primary action activity.[454] Its membership of sixteen states is weighted in favor of the largest ship-owning nations.[455]

Currently the Maritime Safety Committee has eleven working subcommittees structured according to technical matters handled. These are Marine Pollution, Tennage Measurement, Subdivision and Stability, Fire Protection, Radio Communications, Cargoes and Containers, Safety of Fishing Vessels, Carriage of Dangerous Goods, Lifesaving Appliances, Safety of Navigation, and Ship Design and Equipment.[456]

Important is the fact that the work on the IMCO technical program is done by the representatives of the member states and not by the small Secretariat. This arrangement produces "a steadying effect because proponent and advocate are obliged to personally undertake /sic/ the basic research to document and support their proposals /sic/"[457] Meetings of these various bodies of IMCO occur about 24 times a year.[458] The final product of IMCO is a resolution adopted by the Assembly after consideration by the appropriate subcommittees, committee and Council.[459] Since the IMCO resolution is in the form of a recommendation and never a

binding obligation, it is up to the individual governments concerned to adopt the recommendation if it desires.[460]

1958-1966 Pre-Torrey Canyon

From 1958 until 1966 IMCO had produced agreement on a significant number of matters relating to oil pollution prevention. These included:[461]

(1) standardized day and night markings for oceanographic craft and structures;

(2) recommended maintenance of certain navigation lights in islets in the Red Sea to enhance safety of tankers and other vessels plying those waters;

(3) endorsed the separation of traffic in the Strait of Dover and improvement of the pertinent navigational aids;

(4) developed jointly with the International Labor Organization a guidance document on the education and training of masters, officers and seamen;

(5) revised the International Code of Signals;

(6) agreed upon lights and shapes for dracones under tow;

(7) promoted the extension of weather reporting services;

(8) agreed to encourage provision of spaces onboard ship for the separation, clarification or purification and carriage of slop oil by allowing such spaces to be deducted from gross tonnage in determining net tonnage;

(9) recommended the performance of navigational lights in large vessels with high superstructures aft; and

(10) conducted in 1966 a major international conference which updated the International Load Line Convention of 1930[462] including for the first time requirements for the internal compartmentation of cargo ships.

1967 Post-Torrey Canyon

The May 1967 special meeting of the IMCO Council, called at the request of the British, produced additional work in pollution control. They have been divided into three categories:[463]

(1) Preventive measures:

(a) sealanes;

(b) shore guidance;

(c) speed restrictions;

(d) navigational equipment;

(e) officer and crew training;

(f) use of automatic pilots;

(g) construction and design of tankers;

(h) identification and charting of hazards.

(2) Remedial measures:

(a) procedures in the event of accidents;

(b) research in oil clearance.

(3) Legal measures:

(a) legal rights of coastal states;

(b) official inquiries;

(c) liability in event of accidents;

(d) compulsory insurance for tankers;

(e) movement of salavage equipment.

Previous mention has been made of most of the legal measures which were considered by the Legal Committee.

1968

In 1968 the IMCO Assembly met in its fourth extraordinary session and adopted about thirty resolutions, two-thirds of which were related to pollution control. These resolutions concerned:[464]

Resolution No.

146 -- amendment of the Safety of Life At Sea Convention of 1960 (Solas 1960) to require radar, radio direction-finding gear, gyro compass, echo sounder, nautical publications and use of automatic pilot.

147 -- requiring masters to report all incidents in which they are involved to a government appointed officer or agency if an oil spill occurs or is probable.

148 -- government implementation of arrangements to deal with significant oil spillage from ships.

149 -- regional cooperation in dealing with significant spillages of oil, such as among the North Sea countries (and which was implemented in the Agreement

for Cooperation in Dealing with Pollution of the North Sea by Oil, June 9, 1969).[465]

150 -- research and exchange of information on methods for disposal of oil in cases of significant spills.

151 -- government cooperation in detection of offenses, enforcement of provisions, and investigation of infractions of the 1954 Oil Pollution Prevention Convention.

152 -- encouraging development and use of any possible system or device whereby oily mixtures from tank cleaning or ballasting are not discharged into the sea.

153 -- urging review of national laws on penalties for unlawful discharge of oil outside the territorial sea to insure adequate severity, to improve penalties if necessary and submit study and results to IMCO. In addition prosecuting authorities were to be given instructions to enable systematic proceedings to be taken against any unlawful discharge of oil. Also proposals to amend again the 1954 Oil Pollution Prevention Convention to penalize more severely unlawful pollution.

154 -- reports by governments of installation or changes of oil reception facilities to IMCO for

distribution, encouragement of studies on how facilities can be used more effectively and encouragement of ships under their flags to use available shore reception facilities.

155 -- the Maritime Safety Committee insuring that amendments to the 1954 Oil Pollution Prevention Convention, particularly regarding prohibiting discharge of oil outside the prohibited zones, be proposed in time for the next Assembly, and determination of the need for amendment regarding detection and enforcement of deliberate pollution.

156 -- ships being required to carry an efficient electronic position-fixing device suitable for the trade where used and preparation of corresponding amendment of SOLAS 1960.

157 -- recommendation on the use and testing of shipborne navigational equipment. Importance of making most effective use of all navigational aids to be brought to notice of ships' masters. Operational tests of shipborne navigational equipment be carried out as frequently as possible at sea, particularly when hazardous navigation is expected. Tests to be recorded in the Log Book. Encouragement and development and use of reliable speed and distance indicators.

158 -- recommendation on port advisory services, particularly in terminals and ports where noxious or hazardous cargoes are handled, and requiring masters to give early indication of expected time of arrival.

159 -- recommendation of pilotage services to be organized as a contribution to safety of navigation. Defining ships for which pilot services to be mandatory.

160 -- recommendation on data concerning maneuvering capabilities and stopping distances of ships to be available on the bridge for various conditions of draught and speed.

161 -- recommendation on establishing traffic separation schemes and areas to be avoided by ships of certain classes. Adoption of terms, definitions and general principles concerning traffic separation and routing.

162 -- recommendation on additional day and night signals for deep-draught ships in narrow channels.

171 -- convening the 1969 Brussels International Conference on Marine Pollution Damage.

172 -- recommendation for uniform application and interception of Regulation 27 of the International Convention on Load Lines, 1966, governments recommended to give effect to the recommendation as soon as possible.

173 -- participation in official inquiries into maritime casualties.

1969

At the sixth regular session in October 1969 the Assembly adopted another eleven resolutions related to oil pollution. These were:[466]

Resolution No.

175 -- adoption of the 1969 amendments to the 1954 Oil Pollution Prevention Convention in part encouraging greater use of the load-on-top procedure.

176 -- after noting the U.S. Conference on the Human Environment scheduled for 1972, decided to hold another International Conference on Marine Pollution in 1973 to consummate agreement on international restraint of contamination of the sea, land, and air by ships, vessels and other equipment on the marine environment.

177 -- recommending performance standards for navigational lights to insure early identification among vessels of their respective attitudes and conditions of operation.

178 -- recommending adoption of rules for positioning of navigation lights to increase accuracy in estimating the aspect of observed ships.

179 -- recommending establishment of shipping routes through offshore exploration areas to ensure that exploitation of sea-bed resources does not obstruct shipping routes.

180 -- recommending dissemination of the location of off-shore platforms by Notices to Mariners and/or radio warnings.

182 -- recommending the fitting of off-shire platforms and associated ships, airfraft and land stations with maritime mobile safety radiocommunications equipment.

186 -- adoption of traffic schemes in the approaches to New York Harbor, Santa Barbara and Delaware Bay, along with schemes for other areas in Europe and South Africa.[467]

188 -- recommending superceding by "Document for Guidance--1968" of earlier-approved one.

189 -- authorizing a study on the need of centralizing in IMCO the statistical experience of oil spills.

192 -- authorizing study and preparation for a conference revising the Regulations for Preventing Collisions at Sea, 1960[468] to be held in 1976.

1970

During 1970 the Legal Committee's Working Group on the Establishment of an International Compensation Fund for Oil Pollution Damage made substantial progress on drafting that convention.[469]

At its 21st session in February 1970, the Maritime Safety Committee agreed on two recommendations which will be submitted to the Seventh Assembly for adoption. The first dealt with maneuvering data and supplementary information for each ship to be available to the master to give him maximum information on the performance of his ship in emergencies. The second relates to steering gear for tankers about 20,000 gross tons.[470]

The Maritime Safety Committee's Subcommittee on Ship Design and Equipment reported in 1970 that present technology of ship design and construction afforded no immediate practical means to reduce the risk of collision or stranding, but that new devices such as high-powered lateral thrusters braking devices and controllable pitch propellers could produce improvements and research on them was underway in several countries.[471] At the October 1970 meeting of the Maritime Safety Committee an interim recommendation was adopted that no further increase in tank sizes should be contemplated and set a provisional upper limit of 30,000 cubic meters for a wing tank and 50,000 cubic meters for a center tank on oil tankers. The Subcommittee on Ship Design

and equipment was instructed urgently to determine feasible reduction in tank size limits.[472]

1971

The Maritime Safety Committee in March 1971 adopted additional traffic separation schemes bringing the total to 65,[473] and additional schemes are under active consideration.[474] In addition the Maritime Safety Committee directed the Sub-committee on Safety of Navigation to study the recent incidents in the English channel[475] relative to a possible need to unify the buoyage system used in international waters, particularly those marking wrecks and other dangers to shipping; approved performance standards for navigational radar equipment; and adopted a recommendation on improving the reliability of the steering gear on large ships. The Committee also authorized studies on promulgating navigational warnings to shipping and on enhancing safety of navigation through the Straits of Dover. Additional amendments to the 1954 Oil Pollution Prevention Convention were prepared to prohibit discharge of oil within 50 miles of the Great Barrier Reef off the northeast coast of Australia. Pursuant to previous direction[476] the Committee considered the works of the Sub-committee on Ship Design and Equipment to reduce the size of individual tanks on supertankers. The Maritime Safety Committee, as a result of those studies, proposed another amendment to the 1954 Oil Pollution Prevention Convention to require that no more than 30,000 cubic meters of oil would

be discharged from any single tank breached in a collision by any tanker built after January 1, 1972.[477] These amendments will be considered for adoption by the Seventh IMCO Assembly.[478]

The Subcommittee on Marine Pollution has prepared draft specifications for oily-water separators and oil-content meters for use on board ships. These will be considered by the Seventh Assembly for adoption and recommendation to Governments for implementation.[479] In addition the Subcommittee on Marine Pollution is using the information from Governments of their national arrangements, methods and means for dealing with significant oil spills to prepare a practical manual for the guidance of Governments in developing Oil Spill Contingency Plans.[480]

The twenty-sixth meeting of the IMCO Council in June 1971 produced rather historic decisions which are expected to be enacted upon at the seventh regular Assembly meeting scheduled for October 5-15, 1971.[481] The Council considered the Maritime Safety Committee's recommendations of March 1971 that the 1973 IMCO Conference on Marine Pollution have as its main objective the achievement, by 1975 if possible, but certainly by the end of the decade, the complete elimination of wilful and intentional pollution of the sea by noxious substances other than oil and the minimization of accidental spills. The Council decided that the agenda of the 1973 Conference on Marine Pollution should include:

(1) further revision of the 1954 Oil Pollution Prevention Convention to make it an enforceable document providing for the complete elimination of the wilful and intentional pollution of the seas by oil;[482]

(2) extension of the 1954 Oil Pollution Prevention Convention or creation of a new instrument to provide for (a) the complete elimination of the wilful and intentional pollution of the sea by activities such as tank washing and bilge discharge of noxious and hazardous cargoes other than oil, and (b) minimization of spillage of oil and other noxious substances as a result of accidents;[483]

(3) establishment of an instrument dealing with the safe carriage of dangerous goods from the point of view of protection of the marine environment, its living resources and amenities;[484]

(4) establishment of an instrument dealing with the disposal or treatment of ship-generated sewage or waste;[485]

(5) establishment of a scheme on effective enforcement of existing and future conventions. With regard to the 1954 Oil Pollution Prevention Convention, the following aspects are to be considered:[486]

(a) development of an international arrangement to facilitate inspections of oil record books in loading and repair ports to detect breaches of the Convention;

(b) institution of a simple on-the-spot procedure to deal with such offenses;

(c) review of the system of penalties of the Convention;[487] and

(d) development of internationally agreed specifications for instruments and other equipment, such as continuously recording oil content meters, to facilitate enforcement of the Convention;

(6) revision of existing conventions, and incorporation in future conventions, to provide for a procedure for rapid amendment of the conventions' standards and regulations to keep abreast of the current state of the art in marine transportation;

(7) requested the Maritime Safety Committee to continue work on the preparation of:

(a) a new convention to provide for minimization of the wilful, intentional and accidental pollution of the seas by oil and other substances from off-shore facilities, and

(b) a new convention dealing with dumping or other means of disposal of shore-generated waste and sewage in the seas by ships and barges;[488] and

(8) requested the Legal Committee to consider extension of the Intervention and Civil Liability Conventions to cover pollution casualties by noxious and hazardous cargoes other than oil and those resulting from exploration and exploitation of the sea-bed and ocean floor.[489]

Prevention

"The best method to control pollutant spills is preventing their occurrence."[490] Prevention takes many forms. They include those of a deterrent nature, those which tend to minimize human error, and those which physically reduce oil content in waste.

Legal regulation is the most frequently used deterrent and has been described in detail throughout this study. Deterrence is effectuated by enforcement of those laws. Enforcement has previously been difficult not only because of the general lack of sanctions in the laws but also because of the previously difficult task of detecting oil spills at or near the time they occurred and in identifyinf the spilled oil as coming from a particular vessel. Efforts to increase the sanctions in the laws have been previously described. Detection is apparently no longer limited to the daytime good visibility situations with the development of aerial conventional and ultraviolet photographic and radar and passive microwave techniques.[491]

Identification of the source of oil pollution could be accomplished by "passive tagging" and "active tagging". Passive tagging involves chemical analysis of a particular spill to identify a unique stable chemical fingerprint. Research indicates that this tenchique is chemically and forensically unsatisfactory.[492] However the process of active tagging appears to be capable of accomplishing the task.

Active tagging involves the addition to the oil on loading or change of ownership of an inexpensive, stable and coded material which is readily identifiable and does not interfere with subsequent use of the petroleum. Research indicates that development of a satisfactory active tag is in the near future.[493]

Minimization of human error can be best accomplished by proper training of ship's personnel. A detailed indoctrination and training program is in use and results are indicative of its success.[494] Since many oil spills occur during transfer of petroleum and oily waste in port,[495] a method has been developed to insert tank vessel overfill alarm instruments through tank-top ullage holes to sound an alarm which the product reaches a level where spill is imminent and another is being developed to automatically accuate shut down of pumps or closing of valves upon receipt of an overfill alarm.[496] In addition oily water separators are being developed both for shoreside and shipboard operation, to complement the land-on-top procedure employed by most oil companies today.[497]

Control

Control of oil pollution once it has occurred is designed to prevent the oil from spreading further. This may be accomplished by prevention of further oil escaping from the vessel and by containing what is already spilled. The Coast Guard appears to have caused the successful development of a system to remove oil from a damaged tanker. It is

an air deliverable antipollution transfer system (ADAPTS), consisting of portable pumps, pump prime movers, temporary oil storage containers, transfer piping, necessary fittings and tools and requisite air delivery equipment designed to perform effectively in 40-mph winds and 12-foot seas, air deliverable within four hours of notification, capable of deployment and operation without use of surface craft, be self-supporting, and capable of transfer and storing 20,000 tons of crude oil within a 20-hour period. Delivery of the first operational system is expected by the summer of 1972.[498]

Spill containment has received considerably more research effort but the success has not yet been attained. It appears "unlikely that any one boom will be maximally effective in all environmental conditions" and that "ultimately a 'family' of booms for all occasions should be developed."[499] This is so because in stagnant water, almost any barrier will contain oil. However, at the other extreme, a violent storm on the high seas presently presents an insurmountable containment problem.[500] There are an increasing number of systems which however do work well within their parameters.[501]

Cleanup

Cleanup of oil pollution involves several different operations. Cleanup requires removal of the oil from the surface of the ocean, from the beaches, and from the living organisms it contaminates, normally at some considerable

period of time after the spill occurs. Removal from the surface of the ocean may be by several methods. The oil on the surface may be burned, sunk, emulsified or decomposed, or it may be collected from the surface and taken away for separation. As might be expected none is best for all circumstances and there is currently no excellent solution for any. Currently the most effective with the least ecological and personal danger is concentrating the oil in an absorbent and removing both from the surface of the ocean. Considerable research continues in this area but solutions are not as near at hand.[502] The techniques of removal from beaches do not seem to have produced any truly satisfactory method,[503] although some techniques seem promising.[504] Methods of cleaning seabirds contaminated by oil are primitive and rarely very successful.[505]

CHAPTER VI

APPRAISAL AND RECOMMENDATIONS

As with most claims to competing uses of the oceans, appraisal is framed in the general question of reasonableness. The following factors were previously suggested as relevant in ascertaining the reasonableness of the coastal state claim to require financial responsibility:

(1) extensiveness of the claim of authority;

(2) areas subject to authority;

(3) interests the coastal state seek to protect or promote;

(4) the significance of those interests, both between claimants and through the passage of time;

(5) the relationship between the authority claimed and the significance of the interests sought to be protected;

(6) possible alternatives;

(7) degree of interference caused by the claim; and

(8) duration of that interference.

Applying these criteria to the United States claim, one finds the following:

(1) the United States claim is quite comprehensive since it applies to all ships over 300 gross tons except self propelled barges not carrying oil as cargo or fuel of whatever registry or nationality using U.S. waters regardless of the purpose of the use of those waters;

(2) the claim is also quite comprehensive since it applies not only to U.S. internal waters but to the whole of the United States territorial sea wherever located. Currently the area this encompasses is 3 miles from the base line, but may soon extend to 12 miles, possibly or even to 200 miles. It does not currently extend to the contiguous zone of the United States.

(3) The interests the United States seeks to protect have been mentioned previously. Briefly they include the wealth of the U.S. government directly, national wealth and well-being, and the wealth and well-being of its citizens.

(4) The wealth and well-being interests of coastal states are shared by the flag states and are equally significant to each claimant and through the passage of time. Wealth and well-being are fundamental interests of citizens which take second place to none. To the extent that the wealth interest of the coastal state itself is at stake, then its importance is better considered less than the wealth and well-being of either its citizens or of the citizens of a flag state represented by the owners of the vessels and cargoes and the crews and other individuals dependent on maritime commerce. The significance of the wealth and well-being interests between individuals is thus very difficult to measure and one is probably not any more significant than the other.

(5) The authority claimed by the United States is

to ensure that compensation for damages will be available to the United States government. The wealth and well-being interests of the U.S. and its citizens are undoubtedly very significant. The claimed authority is therefore directly related to a perservation of those significant coastal interests.

(6) The possible alternatives to the U.S. requiring financial responsibility of ships engaged in innocent passage through her territorial waters are in many respects already being adopted. The international compensation fund supplementary to the Civil Liability Convention if adopted should satisfy the needs of the U.S. In the meantime TOVALOP and CRISTAL provide significant insurance protection to the U.S. interests and statistically should cover some or most of the tankers who have not complied with section 11(p)(1) of the WQIA. Senator Muskie has suggested urgent bilateral negotiations with Canada to establish a financial responsibility regime to protect U.S. and Canadian coasts from pollution dangers of tankers passing through coastal waters bound for the other nation's ports. Indirectly, other and perhpas more significant alternatives are encompassed in the very large amount of efforts being made to prevent oil pollution from occurring in the first place.

(7) It is difficult to measure the degree of interference caused by the U.S. claim. Compliance by half of the world's merchant fleet does not indicate why the complied

individually or why the other half has not complied. Information is not available to determine if the effect of this claim has been to drive vessels in normal trade routes passing U.S. coasts outside the U.S. territorial sea or if it has kept any ships from visiting or trading in U.S. ports. Since the United States does not seem to have attempted to enforce that claim the degree of interference is diminished as to those who are acting in defiance or ignorance of the law. The potential for significant intereference is nevertheless great. To the extent that the U.S. claim encourages similar unilateral -- and differing -- financial responsibility claims a greater interference with innocent passage in territorial seas generally results.

(8) The U.S. claim is not conditioned -- expressly or by interpretation -- to be other than of permanance of duration.

Appraisal of the reasonableness of the flag nation counterclaim of innocent passage was previously suggested to require consideration of the following factors:

(1) the activity subjected to coastal authority;

(2) the importance of the interests the flag state seeks to protect;

(3) the main use of the territorial sea which is affected by the claim;

(4) the intensity of use of the territorial sea by the counterclaimant in the particular portion of the territorial

sea affected;

(5) the significance of the use of the territorial sea by the counterclaimant, measured by:

(a) the strategic location of the territorial sea,

(b) any available alternative routes, including passage outside the territorial sea,

(c) the extent of interference with the use, and

(d) any other special factors; and

(6) the extent to which the interest at stake is shared by other states.

We next apply these factors to the foreign flag tank ship counterclaim of innocent passage. This analysis is necessarily restricted to tankers because of the lack of available information as to dry cargo foreign merchants and because the perceived danger is mainly from the tankers.

(1) The specific activity subjected to coastal authority is passage of vessels through the U.S. territorial sea without entering a U.S. port or internal waters.

(2) The interests which the flag state seeks to protect are quite significant. The interests are contained in the phrase "freedom of navigation". They include not only the immediate financial interests which are adversely affected by increased costs either of compliance or of greater distances to travel when required to remain 3, 12 or 200 miles from U.S. coasts if that vessel is not intending

to make for a U.S. port. They also include the observable tendancy for limited special purpose claims of authority to develop into more comprehensive and restrictive claims to control all activity and thereby diminish the flag nations' freedom of the seas.

(3) The main use of the territorial sea affected by the claim is naturally the movement of passing vessels.

(4) The intensity of such use was not able to be determined. However, because of Senator Muskie's recent views it appears that at least in certain parts of the U.S. territorial sea the intensity of foreign flag traffic is significant. Certainly in other territorial seas of the world the vessel traffic is quite significant.

(5) The significance of the use of the territorial sea by flag nations cannot also be measures except in a general way. Some protions of the U.S. territorial sea are undoubtedly important to foreign vessels: e.g., off the Maine coast. Alternative routes may well in certain locations be more dangerous or noticeably more expensive. The actual interference measured by enforcement efforts has been nill. However the psychological interference is unknown but may well be significant.

(6) It has been demonstrated that all flag states share the interest in innocent passage which is at stake in this situation. But it was demonstrated at the beginning of this study that all states have a common interest in the

oceans and the concept of innocent passage has been shown to support that commonality of usage. The interest at stake is hopefully not to be free from the costs of having to pay for damages caused by oil pollution in any particular territorial sea. The interest is certainly in minimizing the cost of providing that compensation and, we hope, in providing it to all who may be damaged and in what ever state they may occur. The flag states certainly share an interest in having a uniform requirement rather than a proliferation of differing financial responsibility requirements.

Finally the third part of the analysis previously suggested called for an examination of the comparative factors of:

(1) the degree of interference, i.e., where in the range from complete incompatibility to minimal conflict, and

(2) the duration of the interference, in the range from temporary to permanent.

It appears that the degree of interference is technically completely incompatible but currently in practice is one of minimal conflict. The duration of the interference is on paper permanent -- and is like to remain so after the adoption of the compensation fund and the Civil Liability Convention simply because of the current silence on the issue. However if enforcement legislation is ever proposed, enacted and then enforced against foreign vessels passing through the U.S. territorial sea, the degree of incompatibility

will become very great in fact and in result the duration may well be only temporary.

The thesis is then that the need for compensation can best be found internationally and need not be imposed by coastal states in contravention of traditional arrangements of competences. Thus requiring financial responsibility of ships in passage through territorial seas -- and canals and international straits for similar reasons -- is an unnecessary method to accomplish the purpose of financial protection with the available alternatives and with no demonstrated coastal need to apply the financial responsibility requirements on ships in passage to accomplish the prime coastal purpose of financial protection.

The practical evidence of the truly staggering efforts to prevent the control oil spills indicates -- in the absence of proof the vessels in passage cause measurably significant oil pollution of the oceans landward from the territorial sea -- that requiring financial responsibility of ships in passage is overkill to achieve a proper protective interest. If the object is to insure that money will be available to pay for damage caused by those uncounted ships engaged in innocent passage, an international compensation scheme is preferred where coastal legislation runs counter to the established and worthwhile purpose of the innocent passage doctrine.

The purpose of the territorial sea is protection of coastal state exclusive interests and uses. Even today the bulk of world commerce is carried on the oceans. The world is truly interdependent. Maritime commerce does need today as much encouragement as it ever did. What is new today is an arising recognition of different coastal interests which are not being served by the existing law of the sea. To the extent that coastal state claims to exercise exclusive competencies over greater portions of adjacent sea space -- even to 200 miles -- are tolerated or recognized, the need for the innocent passage doctrine given the basic need for maritime commerce by all nations of the world is ever increased.

Canadian and United States coastal claims to require financial responsibility of ships in their waters have not been specifically opposed on innocent passage grounds. That may be so because the function of the doctrine has been lost sight of by the claimants and decision makers in the law of the sea area. Innocent passage says so much in two words without any clear definition attending to it. Innocence is based on reasonableness -- by coastal states and by flag states. Reasonableness can never, in an international community, be decided unilaterally by one state. What is reasonable must be decided by a concensus of all nations taking into account the interests and uses of all nations in the particularities of each type of passage.

The purpose of financial responsibility to provide funds for compensation when needed is met by international practice with TOVALOP and CRISTAL --- actual private international agreements with functioning insurance companies to provide the financial actualities to satisfy any coastal state. These contractural arrangements in the oil industry demonstrate that the coastal state interest in funds being available has been quickly and probably adequately met. $30 million is available to pay for all oil pollution damages of an oil tanker incident. The airline industry has $100 million available without governmental backing. Existing and proposed international conventions would provide identical financial protection to coastal states and their inhabitants for oil pollution damage from tankers. There seems little reason to believe that similar international agreements cannot be made for oil pollution financial protection from ships other than tankers -- or for financial protection from other hazards of ocean transport of hazardous substances.

The purpose of financial responsibility to encourage prevention of oil spills in the first place or control when they occur is a secondary objective in relation to the means. More direct approaches, both domestic and international, have been undertaken and are underway. They give rise to great expectations that the problems of intentional and even accidental oil spills will be greatly diminished in the very

near future. Thus if the alternatives of direct action in favor of prevention and control of oil spills are working, then a coastal state method of indirectly meeting that objective at the expense of recognized international law is definitely not appropriate, reasonable or acceptable to the international community.

Requirements of financial responsibility by coastal states as a latent objective of increasing coastal state world power is rejected for the previous reasons as well as considerations, here important of reciprocity. Maximum peaceful uses of the oceans is the prime goal of the law of the sea. Expansion of a particular coastal state's world power position in this manner, either temporarily or more durably over time, only provokes other states to act in a similar manner. The result is greater tension rather than greater peace. Accomodation of interests and uses, inclusive and exclusive, is maximized by denying recognition to such expansive claims sounding in sovereignty over expanding parts of the oceans.

The need for coastal protection is a need common to all coastal nations, not only to the claimants here under examination. It is indeed a need common to all nations of the world. The potential if not the proven actual effects of oil pollution affect all states and all inhabitants of Spaceship Earth. The objective then is truly inclusive.

Protective action should be similarly inclusive. Existing models indicate that protection is being created in a manner that protects all states and all states' inclusive interests. Accordingly, financial responsibility requirements for oil pollution damage should not be imposed unilaterally by coastal states on ships engaged in passage through a territorial sea.

FOOTNOTES

FOOTNOTES

[1] The Oil Pollution Act of 1924, 43 Stat. 604, 33 U.S.C. §§ 433 (1964), as amended by § 211 of the Clean Water Restoration Act of 1966, 80 Stat. 1252, 33 U.S.C. § 433 (Supp. III, 1968); The Oil Pollution Control Act of 1961, 75 Stat, 402, 33 U.S.C. §§ 1001-15 (1964), as amended by Pub. L. No. 89-551, 75 Stat. 402 (1966).

[2] Pub. L. No. 91-224, 84 Stat. 91 (1970), amending The Federal Water Pollution Control Act, 33 U.S.C. 466 et. seq.

[3] WQIA § 11 (p)(1).

[4] See chapter V infra.

[5] See Program of Policy Studies in Science and Technology, Geo. Wash. U., Legal, Economic and Technical Aspects of Liability and Financial Responsibility as related to Oil Pollution: A Study for the U.S. Coast Guard iii, 5-17, 7-6 & 7-8 (1970) (hereinafter cited as § 11 (p)(4) Study).

[6] Art. 15 para. 1, Convention on the Territorial Sea and Contiguous Zone, done at Geneva April 29, 1958, in force for the United States Sept. 10, 1964, 15 U.S.T. 1607, T.I.A.S. No. 5639, 516 U.N.T.S. 205 (hereinafter cited as the Territorial Sea Convention). Although the travaux preparatoires of article 15 of the Territorial Sea Convention shows that this article was directed at more positive acts against foreign vessels in the territorial sea, the travaux preparatoires set forth infra in chapter V equally shows that article 17 of that convention contains restrictions of a general nature on the coastal laws to which a foreign vessel in passage may be subject. See Comparative Chart 2 preceding page 1.

[7] See infra chapter II.

[8] W. Friedmann, The Future of the Oceans 45 (1971); cf. W. Marx, The Frail Ocean 190-91, 204 (1967).

9 See e.g., the lengthy statement of Dr. Arvid Pardo, Maltese Permanent Representative to the U.N., to the Main Committee on the Peaceful Uses of the Sea-Bed and the Ocean Floor Beyond the Limits of National Jurisdiction, Geneva, March 23, 1971, in which he advocates universal recognition of a 200 mile territorial sea with considerable limits placed on the exercise of coastal state jurisdiction within that area, and G.A. Res. 2750C, 25 U.N. GAOR Supp. , at , U.N. Doc. A/ (1970).

10 The methodology used in this study is based upon the policy-oriented jurisprudence developed by Professors Lasswell and McDougal of the Yale Law School. The basic structure and concepts are drawn from M. McDougal & W. Burke, The Public Order of the Oceans (1962) (hereinafter cited as McDougal & Burke). Invaluable assistance in applying the methodology to this particular pollution control problem was drawn from N. Wulf, Contiguous Zones for Pollution Control: An Appraisal Under International Law (Sea Grant Tech, Bull. No. 13 U. Miami Law School, 1971) (hereinafter cited as Wulf, Contiguous Zones for Pollution Control) and R. Cundick, Oil Pollution: A Juridical Analysis of the Right of a Coastal State to Intervene by Removing or Destroying a Vessel on the High Seas which Threatens Pollution of its Coastal Interests (unpublished LL.M. thesis on file in the George Washington U. Library, 1971) (hereinafter cited as Cundick, Oil Pollution: Intervention) and extensive conversations with both authors. Responsibility for the contents of this study, however, is solely the author's.

11 Of the 151 states shown in Man's Domain: A Thematic Atlas of the World (McGraw-Hill Book Co. 1969), 126 have coastlines on continents or islands. Only 25 states are land-locked. Contra, W. Friedmann, The Future of the Oceans 14 & 43 which states, without citation or list, there are 29 land-locked states. A listing of the 151 states appears in Appendix D, along with the states' territorial sea claims, whether the states are parties to the main maritime conventions, and whether they are members of the United Nations.

12 K. Turekian, Oceans 1 (1968).

13 Id. at 2.

14 The oceans are also the primary source of rain and snow. The oceans' high heat capacity regulates climate. The ocean

currents are of great maritime significance. Ibid.

15 McDougal & Burke 52; K. Turekian, Oceans 2.

16 McDougal & Burke 849.

17 The territorial sea is described in §§ I of the Territorial Sea Convention.

18 See, e.g., Schachter & Serwer, Marine Pollution Problems and Remedies, 65 Am. J. Int'l L. 84 (1971) and sources cited therein; sources listed in Sen. Public Works Comm., 92d Cong., 1st Sess., Oil Pollution of the Marine Environment---A Legal Bibliography, (Comm. Print, ser. 92-1, 1971); sources listed in various issues of Marine Pollution Bull.; and in Environment Information Access.

19 Study of Critical Environmental Problems (SCEP), Mass. Inst. of Tech., Report: Man's Impact on the Global Environment: Assessment and Recommendations for Action 27, 141-42 (1970) and sources cited therein (hereinafter cited as SCEP Report) § 11 (p) (4) Study at 16-2; Nat'l Petroleum Council, Environmental Conservation: The Oil and Gas Industries 29 para. 23 (1971) (hereinafter cited as N.P.C., Environmental Conservation); Earth Tool Kit: A Field Manual for Citizen Activists 244-58 (S. Love ed. 1971) (hereinafter cited as Earth Tool Kit).

A recent collection on reports on the physio-biological effects of oil pollution is contained in Proceedings of Joint Conference on Prevention and Control of Oil Spills June 15-17, 1971 Sheraton Park Hotel Washington, D.C. 429-494 (hereinafter cited as 1971 Oil Spills Conf. Proc.). Contra, Gross, The Pollution of the Coastal Ocean and the Great Lakes, 97 U.S. Naval Inst. Proc. Naval Review Issue, May 1971, 228 at 239.

Dr. Max Blumer, Senior Scientist, Dep't of Chemistry, Woods Hole Oceanographic Institution, Woods Hole, Mass. raises perhaps the most vocal warnings of the dangers of oil pollution of the oceans based on his studies of the effects of a spill of about 700 tons of #2 fuel oil which came ashore on Sept. 16, 1969 in West Falmouth, Buzzards Bay, Mass. See, e.g., Blumer, Scientific Aspects of the Oil Spill Problem, a paper presented to the NATO-CCMS Oil Spills Conference, November 1970, in 1 Environmental Affairs 54 (1971); Blumer, Sanders, Grassle & Hampson, A Small Oil Spill, 13 Environment, March 1971, at 2;

Blumer, Oil Pollution of the Oceans, 15 Oceanus, Oct. 10, 1969, at 3; American Chemical Society, Oil in the Sea, Men and Molecules Transcript #508 (radio broadcast featuring Dr. Blumer); Young, Pollution, Threat to Man's Only Hope, 138 National Geographic 737, at 761-62 (1970).

[20]SCEP Report 27; U.N. Sec'y General, The Sea, infra note 29, at 29. Cf. Council on Environmental Quality, Environmental Quality: The First Annual Report of the Council on Environmental Quality 101 (1970).

[21]See, e.g., §§ 11(p)(4) Study at 16-6 and sources cited therein; Sec'y of Interior, The National Estuarine Pollution Study: A Report to the U.S. Congress, Sen. Doc. No. 91-58, 91st Cong., 2d Sess. at 251, 293-96 (1970); W. Marx, The Frail Ocean 71-74.

[22]There does not appear to be a central source listing known oil spills. Some listing of oil spills may be found in Horizon to Horizon, 13 Environment, March 1971 at 16-21 (covering the period Nov. 1969 to Jan. 1971); 11 Environment, Nov. 1969, at 11 (covering the period 1907 to 1969); Water Pollution--1969, infra note 70, pt. 1, at 142 (1960-66) & at 182 (1968), pt. 2, at 422 (1960-67), and pt. 4, at 1010-11 (1968-69), at 1311-12 (1960-68) & at 1316-18; Sec'y of Interior, Report to the Congress: The National Estuarine Pollution Study, Sen. Doc. No. 91-58, 91st Cong., 2d Sess. 293-96 (1970) (birds); Secretaries of Interior and Transportation, Oil Pollution: A Report to the President on Pollution of the Nation's Waters by Oil and Other Hazardous Substances 6 (1968) reprinted in Oil Pollution: Problems and Policies 62 (S. Degler ed. 1969); Fed. Water Quality Admin., Dep't of Interior, Clean Water for the 1970's: A Status Report, 8-9 (1970); Note, Recent Developments in the Law of the Seas: A Synopsis, 7 San Diego L. Rev. 627, at 646-60 (1970) (1969-70); Note, Recent Developments in the Law of the Seas II: A Synopsis, 8 San Diego L. Rev. 658, at 667-82 (1971) (1970-71); Environmental Policy Div., Congressional Res. Serv., Lib. of Cong., Congress and the Nation's Environment: Environmental Affairs of the 91st Congress, 97-97 & 200 (Sen. Comm. on Interior & Insular Affairs Comm. Print, 92d Cong., 1st Sess. 1971) (hereinafter cited as Congress and the Nation's Environment).

[23]§§ 11(p)(4) Study at 16-1; SCEP Report at 139.

[24]SCEP Report 139.

[25]Apparently most accidents in oil spills have occurred fairly near shore, within about 25 miles from land. SCEP Report 139; N.P.C., Environmental Conservation 26.

[26]§ (p)(4) Study at 15-1; N. Wulf, Contiguous Zones for Pollution Control 9-12 and sources cited therein.

[27]Congress and the Nation's Environment 200, citing Oil & Gas J., June 1970.

[28]SCEP Report 139.

[29]T. Heyerdahl, Atlantic Ocean Pollution Observed by Ra Expedition: Report and Samples Delivered to the Permanent Mission of Norway to the U.N. (1970), in U.N. Sec'y General, The Sea: Prevention and Control of Marine Pollution, U.N. Doc. E/5003, Annex II (May 7, 1971) (hereinafter cited as U.N. Sec'y General, The Sea).

[30]§ 11(p)(4) Study at 15-2; see also 1971 Oil Spills Conf. Proc.457-78, 489-94.

[31]See the table in Wulf, Contiguous Zones for Pollution Control 5 compiled from data set forth in Report of the Panel on Marine Resources, 3 Panel Reports of the Commission on Marine Science, Engineering and Resources VII-193 & VII-195 (1969).

[32]Marine Science Affairs--Selecting Priority Programs, Annual Report of the President to the Congress on Marine Resources and Engineering Development, together with the Report of the National Council on Marine Resources and Engineering Development 21 (1970) (hereinafter cited as 1970 Marine Science Affairs). The President of Gulf Oil Corp. reported that crude oil alone accounts for more than half of the world's ocean cargo tonnage (over 600 million tons of crude a year). Address of B. R. Dorsey to Pittsburgh Chapter, Nat'l Ass'n of Accountants, Spring 1970, in 19 The Orange Disc, July-Aug. 1970, at 11.

The U.S. currently imports 23 percent of its oil, mostly from Venezuela. It is predicted by the oil industry that by 1980 the U.S. will import 52 percent of its oil, mostly from the Middle East and northern Africa. Hoyt, Oil Outputs on Verge of Decline, Christian Science Monitor, June 5, 1971, at 1, col. 3.

[33]H. Clarkson & Co. Ltd., The Tank Register 1971 (hereinafter cited as The Tanker Register 1971) at xi gives the following breakdown of the world tank fleet over 6,000 dwt as of January 1, 1971:

Total Tanker Including Dual/ Special Purpose Tankers	Percentage of World's dwt	Size of Group by dwt
133	17.8	Over 200,000
173	13.2	100,000 - 199,999
389	19.3	70,000 - 99,999
395	13.6	50,000 - 69,999
443	11.1	35,000 - 49,999
517	9.4	25,000 - 34,999
443	5.8	20,000 - 24,000
728	7.7	15,000 - 19,999
313	2.1	6,000 - 14,999
3534	100.0	

[34]Corporate Development Group, Sun Oil Co., Analysis of World Tank Ship Fleet, December 31, 1969, at Table 3B (1970).

[35]The Wall Street Journal reports that "as a rule of thumb, it's about 35% less expensive per ton to haul oil in a 300,000-ton tanker than it is in a 100,000 ton tanker." Williams, Superport Setback, Wall St. J., June 30, 1971, at 16, col. 1. The National Petroleum Council states an estimate that "the transportation cost per barrel for a tanker run from the Gulf Coast to the New York City area is reduced by a factor of almost 3 for an increase in deadweight tonnage from 16,000 to 100,000." N.P.C., Environmental Conservation at 9 par. 5.

[36]The Tanker Register 1971 at 14.

[37]The Tanker Register 1971 at 15, with first quarter 1971 supplement. Five more tankers of the 326,000 dwt class are under construction for Gulf Oil Co. J. Dorsey, remarks, in 19 The Orange Disc, July-Aug. 1970, at 11.

[38]Oil & Gas J., May 31, 1971, at 22.

[39]Ibid.

[40]New Orleans (La.) Times-Picayune, July 31, 1970, in 96 U.S. Naval Inst. Proc., Nov. 1970, at 107.

[41]Wall St. J., June 30, 1971, at 16, col. 1.

[42]The Tanker Register 1971 at 15 & first quarter 1971 supplement.

[43]Statement of Board Chairman E. D. Brockett, Gulf Oil Corp., at 1971 Annual Meeting of shareholders in 19 The Orange Disc, May-June 1971, at 7 (18 vessels); Wall St. J., June 17, 1971, at 4, col. 4 (Standard Oil of New Jersey).

[44]McDonald, Oil and the Environment: The View From Maine, Fortune, April 1971, at 85. It was reported in mid-1970 that eleven 300,000 dwt, 191 200,000 dwt, and 58 100,000 dwt tankers were on order or under construction. Oliver, Garguantuan Tankers: Privileged or Burdened? 96 U.S. Naval Inst. Proc., Sept. 1970, at 40.

[45]The 20 ports are listed by Oliver, supra note 44, at 40, as Long Beach, Calif.; Bantry Bay, Ireland; Finnart and Milford Haven, Great Britain; Rotterdam, Netherlands; La Skhirra, Tunisia; Port de Bouc, France; Haifa, Israel; Mena Al-Ahmadi and Kharg Island in the Persian Gulf; Marsa el Brega, Libya; Las Palmas, Africa; Dumai, Sungai, and Pakning, Indonesia; and Chiba, Tokuyama, Shimotsu, Negishi and Iwakuni, Japan. As a result transshipment terminals are being constructed. The first of these are Bantry Bay Terminal, Whiddy Island, Eire and Okinawa Terminal on Heianza Island, Kin Wan Bay, Okinawa, Ryukyus Island. 19 The Orange Disc, 1970, at 8-17.

[46]Wall St. J., June 30, 1971, at 16, col. 2; Oliver, supra note 44, at 40. The controversy over development of the Maine deepwater ports is recounted in Fortune, April 1971, at 84; Time, April 12, 1971, at 45; Wash. Post, April 11, 1971, at A6, col. 1.

[47]Fortune, April 1971, at 85. At present the maximum depth of a North American port is 45 feet. J. Commerce, June 23, 1970, in 96 U.S. Naval Inst. Proc., Dec. 1970, at 107.

[48]Wall St.J. June 30, 1971, at 16, col. 1; Report of the Panel on Management and Development of the Coastal Zone, 3 Panel Reports of the Commission on Marine Science, Engineering and Resources III-69 (1969).

[49]Time, March 29, 1971, at 48; Oliver, supra note 44, at 40.

[50]See also Cabinet Task Force on Oil Import Control, The Oil Import Question: A Report on the Relationship of Oil Imports to the National Security 33 par. 214(a) (1970) (hereinafter cited as The Oil Import Question) and Oliver, supra note 44, at 45.

[51]This list is based on the Track Chart of the World, H. O. 1262 (28th ed. rev. Dec. 1966) and includes those countries lying within 200 miles of a track.

[52]Other methods are examined in Chapter V.

[53]The premier study of flags of convenience is B. Boczek, Flags of Convenience (1962). A recent view of the effectively United States controlled fleet appears in Emery, The United States Effective Control Fleet, 96 U.S. Naval Inst. Proc. Naval Review Issue, May 1970, at 158.

[54]About 90% of the U.S. foreign trade cargo moves by sea while U.S.-flag vessels carry only about 5% by weight of this total. Marine Science Affairs, Annual Report of the President to the Congress on Marine Resources and Engineering Development, together with the Report of the National Council on Marine Resources and Engineering Developments 63 (1971) (hereinafter cited as 1971 Marine Science Affairs).

[55]Statistical Office of the U.N., Statistical Yearbook 1969 at 396-417 (1970)(hereinafter cited as 1969 U.N. Stat.YB.) and Appendices A & E.

[56]E.g., Schacter and Serwer, supra note 18; Comment, Oil Pollution of the Sea, 10 Harv. Int'l L.J. 316, at 350-52, 353-59 (1969); U.S. Delegation to the Conference on Pollution of the Sea by Oil Spills, Committee on the Challenges of Modern Society, NATO, Report Submitted to the President (Nov. 1970); 1971 Oil Spills Conf. Proc. See infra chapter V.

[57]McDougal & Burke, supra note 10, at 179.

[58]Id. at 180-83.

[59]Id. at 180.

[60]Act of Aug. 5, 1886, ch. 929, §§ 3, 24 Stat. 329.

[61]These developments are traced in Nanda, The "Torrey Canyon" Disaster: Some Legal Aspects, 44 Denver L.J. 400, 407-11 (1967).

[62]Act of Mar. 3, 1889, ch. 425 §§ 13, 30 Stat. 1152.

[63]Supra note 1.

[64]International Convention for the Prevention of Pollution of the Sea by Oil, done at London May 12, 1954, in force for the U.S. Dec. 8, 1961, 12 U.S.T. 2989, T.I.A.S. No. 4900, 327 U.N.T.S. 3 (hereinafter cited as the 1954 Oil Pollution Prevention Convention).

[65]The Oil Pollution Control Act of 1961, supra note 1.

[66]Amendments done at London April 11, 1962, in force for the U.S. May 18, 1967, except amendment to Art. XIV in force for the U.S. June 28, 1967, U.S.T. 1523, T.I.A.S. No. 6109, 600 U.N.T.S. 332.

[67]Supra note 1.

[68]Supra note 1. The New York Times reported that Rep. James Wright of the oil-producing state of Texas was responsible for that emasculation by introducing in the Rivers and Harbors Subcommittee of the House Public Works Committee a change in the definition of "discharge" to "grossly negligent or willful." New York Times, Apr. 16, 1967, at 41, col. 1. Davies states that Rep. Wright later denied that he submitted the amendment. J. Davies, The Politics of Pollution 210 n.16 Davies notes that this amendment "went unnoticed." Id. at 46.

[69]The WQIA repealed the 1924 Oil Pollution Act. Pub. L. No. 91-224, § 108, 84 Stat. 113.

[70]The Ocean Eagle went aground in the entrance to San Juan Harbor on March 3, 1968. A report on this spill may be found in Cerames-Vivas, Special Report to Office of Naval Research Oceanic Biology Programs on the Ocean Eagle Oil Spill, in Hearings on S.7 & S.544 Before Subcomm. on Air & Water Pollution of the Sen. Public Works Comm., 91st Cong., 1st Sess., ser. 91-2, at 426 (pt. 2, 1969) (hereinafter cited as Water Pollution-1969).

The Santa Barbara Channel blow out began on January 28, 1969. The extensive Congressional investigations into this incident appear in Water Pollution-1969, pt. 3; Hearings on S.1219, S.2516, S.3351, S.3516 and S.3093 Before the Subcomm. on Interior & Insular Affairs, 91st Cong., 2d Sess. (pts. 1 & 2, 1970); Hearings Before the Subcomm. on Flood Control and Subcomm. on Rivers and Harbors of House Public Works Comm., 91st Cong., 1st Sess., ser. 91-2, 91-3 (1969); and Hearings on H.R. 6495, H.R. 6609, H.R. 6794 & H.R. 7325 Before the House Comm. on Merchant Marine & Fisheries, 91st Cong., 1st Sess., ser. 91-4, at 469 (1969) (hereinafter cited as H.R. M.M.F. Oil Pollution Hearings 1969).

See also Baldwin, The Santa Barbara Oil Spill, 42 Color. L. Rev. 33 (1970), in Law and The Environment 1 (M. Baldwin & J. Page, eds. 1970); Note, Continental Shelf Oil Disasters: Challenge to International Pollution Control, 55 Cornell L. Rev. 113 (1969); Comment, Pollution of the High Seas Resulting from Drilling and Producing Operations--Federal Jurisdiction and Operator Liability, 12 S. Tex. L.J. 73 (1970); Note, Pollution of the Marine Environment from Outer Continental Shelf Oil Operations, 22 S. Carol. L. Rev. 228 (1970); Clingan, Oil Pollution: No Solution? 95 U.S. Naval Inst. Proc., May 1969 at 63; D. Stranghan & B. Abbott, The Santa Barbara Oil Spill: Ecological Changes and Natural Oil Leaks (1969); E. Anderson, L. Jones, C. Mitchell & W. North, Preliminary Report on Ecological Effects of the Santa Barbara Oil Spill (1969).

[71]WQIA §§ 11(b)(2). These exceptions appear in 18 C.F.R. part 610, 35 Fed. Reg. 14306 (1970), Env. Rep. 71:5151 (1970).

[72]WQIA §§ 11(b)(4). Implementing regulations are contained in 33 C.F.R. part 153, 35 Fed. Reg. 17944 (1970), Env. Rep. 71:5171 (1970).

[73]WQIA §§§ 11(c)(1) & 11(i)(1).

[74]WQIA §§ 11(f).

[75]WQIA §§ 11(c)(1) & 11(d). Cleanup may be paid for from the Pollution Fund authorized by WQIA § 11(k). Although $35 million was authorized by § 11(k), only $20.5 million has been appropriated under a continuing resolution for the Dep't of Transportation. 1971 Marine Science Affairs 17. Regulations for administration of the fund appear in 33 C.F.R. subpart 153D, 36 Fed. Reg. 7010-11 (1971).

[76]WQIA §§ 11(b)(4)-(5) & 11(j)(2). The regulations under these sections appear in 35 C.F.R. § 153.03, 35 Fed. Reg. 17944 (1970), Env. Rep. 71:5171 (1970). Issuance of proposed regulations under § 11(j)(2) was expected at the end of July 1971. 2 Env. Rep. 175 (1971).

[77]WQIA § 11(m).

[78]WQIA § 11(p)(1). Implementing regulations are contained in 46 C.F.R. part 542 (1971).

[79]At least the WQIA contains no express grants of sanctioning authority. But see the view of the Federal Maritime Administration set forth in its commentary to its initial rules for financial responsibility for oil pollution cleanup:

> Granted that there is no specific monetary "penalty" provided for any violation of section 11(p)(1) of the Act (WQIA), it is nevertheless a fact that the Act does make certain enforcement procedures, including court injunctions, applicable to section 11(p)(1). Therefore . . . there do exist "sanctions for the failure of vessels to be covered by certificates" and the fact that these sanctions may be administratively difficult to impose does not make them any less available.

35 Fed. Reg. 15217 (1970). It is submitted that there is no language in the WQIA or its legislative history which supports that position of the FMC.

The study conducted pursuant to WQIA § 11(p)(4) states this point clearly:

> The FMC regulations are difficult to enforce because the WQIA fails (1) to impose penalties pertaining to filing false statement in applications for certification; (2) to include

> enforcement provisions, and (3) to provide sanctions for non-compliance. The regulations simply provide that " . . . a Certificate may be denied, revoked, suspended or modified . . . for cause."
>
> There is little deterrent in the prospect of losing a Certificate if there is no penalty for operating a vessel without one.

Section 11(p)(4) Study at 1-9. The Report submitted by the Secretary of Transportation, based on this study, recommended "that adequate sanctions for violations of financial responsibility regulations be provided by statutory enactment." Sec'y of Transportation, Oil Pollution Liability and Financial Responsibility, House Comm. on Public Works Comm. Print 92-5, 92d Cong., 1st Sess. at 10 (1971) (hereinafter cited as Section 11(p)(4) Report). See text infra accompanying notes 191-99.

[80] WQIA § 11(o).

[81] WQIA § 11(a)(3)-(4).

[82] 46 C.F.R. § 542.2(p).

[83] Efforts in 1966 and 1967 regarding liability for oil pollution generally are discussed in Mendelsohn, Maritime Liability for Oil Pollution---Domestic and International Law, 38 Geo. Wash. L. Rev. 1, 3-4 (1969). See Oil Pollution: A Report to the President, supra note 22.

[84] H.R. 15992, 90th Cong., 2d Sess. at 1-2 (1968).

[85] Personal inquiry by author of House Merchant Marine & Fisheries Committee, March 1, 1971.

[86] The effect of private groups on public decision-making is described as follows:

> The most effective way for the private citizen to influence governmental action is usually through group action. The translation of individual wants into group demands is at the heart of the political process in a democratic society. Interest groups not only provide a channel for demands but many also help

to stimulate wants and to foster the translation of wants into demand.

J. Davies, The Politics of Pollution 84-85.

[87]For an interesting description of the jurisdictional conflicts between Congressional committees concerning pollution matters see id. 65-70.

[88]Mr. Checket was employed as Marine General Manager of Mobil Oil Corp. Hearing on H.R. 15906 and related bills Before Subcomm. on Rivers & Harbors of the House Comm. on Public Works, 90th Cong., 2d Sess., ser. 90-28, at 355 (1968) (hereinafter cited as FWPCA--1968).

[89]Both H.R. 14000 and S. 2760 were bills to amend the Federal Water Pollution Control Act, as amended, 33 U.S.C. 466 et seq, and each included a section regarding prevention of pollution of water by oil. S. 2760 had previously passed the Senate on December 12, 1967, 113 Cong. Rec. 36130 (1967). H.R. 14000 had been introduced in the House on November 14, 1967 and referred to the Public Works Committee. 113 Cong. Rec. 32441 (1967).

[90]FWPCA--1968 at 355.

[91]This is another example of "creeping jurisdiction" at work right in the United States.

One might speculate why the American Petroleum Institute opened such a pandora's box. Much of the delay in enacting this legislation was caused by the difficulties in assessing its extent and cost.

The conflicting interests of industry in pollution control are briefly explored in J. Davies at 90-96.

[92]FWPCA--1968 at 359.

[93]Id. at 360.

[94]Id. at 362.

[95]Id. at 703.

[96]Infra note 416.

[97]S. 3206 was originally introduced by Senator Muskie on March 21, 1968 and dealt only with construction of waste treatment works. 114 Cong. Rec. 7221 (1968). After hearings by the Senate Public Works Committee on April 10, 11 and 23, 1968, it was amended to include sections regarding sewage discharged from vessels and water pollution control research. 114 Cong. Rec. 20126 (1968). It was reported out of committee on July 8, 1968. S. Rep. No. 1370, 90th Cong., 2d Sess., 114 Cong. Rec. 20126 (1968). It passed the Senate on July 10, 1968 and contained no provisions regarding oil pollution. 114 Cong. Rec. 20472 (1968). S. 3206 was received by the House on July 11, 1968 and referred to the House Public Works Committee. 114 Cong. Rec. 20798 (1968).

The House Public Works Committee held hearings on S. 3206 but they have not been examined.

[98]The House Public Works Committee bill deleted any coverage of offshore and onshore facilities and reduced the amount of liability for damage caused by oil discharged from vessels. These changes and others have been described as "overall . . . a set of significant concessions to polluting industries." J. Davies, The Politics of Pollution 48. This criticism would not, however, seem applicable to the financial responsibility concept.

[99]H.R. Rep. No. 1946, 90th Cong., 2d Sess. at 36 (1968).

[100]Id. at 2.

[101]Id. at 9-10.

[102]J. Davies, The Politics of Pollution 48.

[103]Ibid.

[104]114 Cong. Rec. 29770 (1968).

[105]J. Davies, The Politics of Pollution 48.

[106]114 Cong. Rec. at 31105. In part the Senate restored coverage of offshore oil facilities.

[107]J. Davies, The Politics of Pollution 48.

[108]These included the offshore oil facilities provisions. 114 Cong. Rec. 31316.

[109]Davies described this inaction as follows:

> Normally it takes only a few minutes for a measure approved by one House of Congress to reach the other. However, the House vote was taken at 12:55 P.M. on Monday and somehow failed to reach the Senate floor before the Senate adjourned at 2:17.[19] Each House blamed the other for failure of the 90th Congress to take any action on water pollution control.

[19]1968 Cong. Q. Alamanac 569 (1969). (Mr. Davies footnote). J. Davies, The Politics of Pollution 48.

[110]115 Cong. Rec. 791 (1969). The remarks of Senator Muskie and Senator Mondale upon introduction of S. 7 appear in id. at 788, 759. The bill was referred to the Senate Public Works Committee. S. 7 was the first bill introduced in the 91st Congress containing a provision regarding financial responsibility.

[111]115 Cong. Rec. 791 (1969)

[112]Text at notes 90 and 99 supra.

[113]Text at note 150 infra.

[114]115 Cong. Rec. 1382 (1960). The transmittal letter from the Secretary of the Interior to Senator Muskie appears at id.1409. Senator Muskie's remarks on introduction of S. 544 appear at id. 1404.

[115]Id. at 1404.

[116]Id. at 1627.

[117]H.R. 4148, 91st Cong., 1st Sess. at 31.

[118]Text at note 115 supra.

[119]Baldwin, The Santa Barbara Oil Spill, 42. U. Colo. L. Rev. 33, 34 (1970); Water Pollution--1969 passim.

[120]J. Davies, The Politics of Pollution 49.

[121] H.R. 5511, 91st Cong., 1st Sess. at 20-21. This bill was introduced on January 30, 1969, 115 Cong. Rec. 2282 (1969), and referred to the House Public Works Committee.

[122] See text at note 111 supra.

[123] H.R. 6495, 91st Cong., 1st Sess. at 5, 115 Cong. Rec. 3050 (1969); H.R. 6609, 91st Cong., 1st Sess. at 5, 115 Cong. Rec. 3269 (1969).

Ten days of hearings were held on these bills by the full House Merchant Marine and Fisheries Committee on February 25 & 27, March 11-13, 18, 26-28 and April 1, 1969. Unfortunately no bills were reported out by this committee.

During those hearings familiar positions were repeated. Secretary Hickle recommended that "a requirement that any vessel--except small and public shipping--using the navigable waters of the contiguous zone for any purpose except innocent passage--secure evidence of financial responsibility." H.R. M.M. F. Oil Pollution Hearings 1969, supra note 70, at 176. He was not questioned about this recommendation. VADM Hirshfield repeated his view that:

> In any event, it is obvious that a requirement of financial responsibility cannot be imposed in conflict with the right of innocent passage, and, presumably that is why section 5 of the bills would be limited to vessels using any port or place in the United States.

Id. at 260. Unfortunately the bills reported out by the Public Works Committee were not so limited in scope.

The House Merchant Marine and Fisheries Committee was given a very abbreviated exposition of the right of innocent passage by one of the two U. S. Navy witnesses to testify on oil pollution--financial responsibility, CAPT John R. Brock, JAGC, USN, then Deputy Assistant Judge Advocate General for International Law. Id. at 322 & 324. Because the legislation before this committee did not purport to violate that right, no substantive comments on innocent passage were made before the committee. The Navy's concern was about proposals to control discharges by non-U.S. citizens from offshore structures outside the U.S. contiguous zone on the U.S. continental shelf. H.R. 6495 and H.R. 6609, § 4(a). No Navy witnesses appeared before the Public Works Committees which were considering similar bills.

[124] 115 Cong. Rec. 4097 (1969)

[125] H.R. 7361, 91st Cong., 1st Sess. at 13.

[126] See text at note 150 infra.

[127] Ibid.

[128] H.R. 7361, 91st Cong., 1st Sess. at 12-13.

[129] The Lake Carriers' Association consists of 22 vessel companies owning and operating an aggregate of 210 bulk-cargo vessels under U.S. flag. These vessels have a total trip-carrying capacity in excess of 2,662,600 gross tons. They transport 98% of the total commerce of the Great Lakes moved by U.S. flag vessels. 194 of these vessels are dry-bulk carriers (mostly of iron ore, grain, coal and limestone); seven vessels are tankers. The remaining 17 U.S. flag vessels who are not members of the Lake Carriers' Association consist of 6 dry-bulk cargo vessels and eleven tankers. The stated concern of the Lake Carriers' Association is with uniform regulations both within the United States and internationally. Testimony of VADM Hirshfield, Water Pollution--1969, pt. 1 at 173.

[130] Water Pollution--1969, pt. 1 at 178-79.

[131] FWPCA--1968 at 457-68.

[132] Water Pollution--1969 at 180.

[133] Id. pt. 4 at 1231, 1232.

[134] Id. at 947-48.

[135] Id. at 954.

[136] Hearings on H.R. 4148 Before the Subcomm. on Rivers & Harbors of the House Comm. on Public Works, 91st Cong. 1st Sess. at 304, 305 (1969) (hereinafter cited as FWPCA--1969).

[137] Id. at 568.

[138] Id. at

[139] Id. at 471. The other bills referred to by Mr. Checket were H.R. 483, H.R. 2184, H.R. 5511 and H.R. 4148. H.R. 483 and H.R. 2184 are identical but they have not been examined.

[140] Text at note 125 supra.

[141] Quoted in text at notes 90 and 132 supra.

[142] FWPCA--1969 at 646.

[143] Davies comments that

> (t)he conservation groups have been primarily concerned with the preservation of fish and wildlife. Because water pollution and pesticides are the two forms of pollution which tend to be most injurious to fish and wildlife, the conservation groups have tended to focus on these areas.
>
> All of the conservation groups . . . have been ardent advocates of strict water pollution control . . . .

J. Davies, The Politics of Pollution 85.

[144] The League of Women Voters is reported to have been interested in water resources since 1956 and its national League headquarters testified before Congress on a wide variety of water resource matters including the various amendments to the Federal Water Pollution Control Act. Id. at 87.

[145] FWPCA--1969 at 640.

[146] The National Wildlife Federation is reported to be probably the largest of the conservation groups, "although its estimate of 2,500,00 'supporters' represents several times the number of its actual members. The Federation issues several regular publications which are widely distributed, and it testifies frequently before congressional committees." J. Davies, The Politics of Pollution at 86.

[147] FWPCA--1969 at 253, 254 & 258.

[148]Id. at 229 (while questioning Mr. Peter N. Miller, March 4, 1969).

[149]115 Cong. Rec. 7574 (1969), H.R. Rep. No. 91-127, 91st Cong., 1st Sess. (1969) (hereinafter cited as H.R. Rep. No. 91-127).

[150]115 Cong. Rec. 9260, 9261 (1969); H.R. Rep. No. 91-127 at 51.

One may note that the section 17(k)(3) is the formal projenitor of section 11(p)(4) of the WQIA.

[151]Text at notes 130, 134, 136 & 137 supra.

[152]Text at notes 125 & 127 supra.

[153]H.R. Rep. No. 91-127 at 4; 1970 U.S. Code Cong. & Ad. News at 812. Barges had not been specifically included in section 17(k)(1) of H.R. 7361.

[154]H.R. Rep. No. 91-127 at 4; 1970 U.S. Code Cong. & Ad. News at 812.

[155]H.R. Rep. No. 91-127 at 4; 1970 U.S. Code Cong. & Ad. News at 822, 823.

[156]115 Cong. Rec. 9015-52, 9259-93 (1969).

[157]Id. at 9292.

[158]Id. at 9510.

[159]Water Pollution--1969, pt. 4, at 1544.

[160]Id. at 1560, 1561. It is uncertain to what Mr. Frank was referring by the word "this".

[161]Id. at 1337, 1338.

[162]115 Cong. Rec. 22908, Sen. Rep. No. 91-351, 91st Cong., 1st Sess. (1969) (hereinafter cited as Sen. Rep. No. 91-351).

[163]Sen. Rep. No. 91-351 at 105; 115 Cong. Rec. 28949 (1969); S. 7 as reported out at 43.

[164]Section 12(q) of S. 7 merely provided that this bill did not affect the question of liability for other damages.

[165]Text at note 150 supra.

[166]Sen. Rep. No. 91-351 at 68.

[167]115 Cong. Rec. 28947-9008, 29046-65 (1969).

[168]Id. at 28960.

[169]Id. at 28970.

[170]Id. at 29063.

[171]November 29, 1969.

[172]Sen. Ex. G (May 20,1970).

[173]116 Cong. Rec. S4392 (daily ed. 1969).

[174]H.R. Conf. Rep. No. 91-940, 91st Cong., 2d Sess. at 93 (hereinafter cited as H.R. Rep. No. 91-940).

[175]Id. at 42; 1970 U.S. Code Cong. & Ad. News at 835-36.

[176]116 Cong. Rec. S4392-424 (daily ed. March 24, 1970).

[177]Id. at S4424. The vote was 80 - 0, with 20 Senators not voting.

[178]Id. at H2466-72 (daily ed. March 25, 1970).

[179]Id. at H2472. The vote was 358 - 0, with 72 abstentions.

[180]Pub. L. No. 91-224, 84 Stat. 91.

[181] Section 11(p)(2), WQIA, provides that "the provisions of paragraph (1) of this subsection shall be effective one year after the effective date of this section."

[182] The President under WQIA § 11 (p) (2) is authorized to delegate the responsibilities to carry out the provisions of § 11 (p) (1) to an appropriate agency. Exercising that power, the President by letter of June 2, 1970, to the Chairman of the Federal Maritime Commission, delegated to the Commission the responsibility to establish and maintain the regulations necessary to carry out the financial responsibility requirements of § 11 (p) (1). 35 Fed. Reg. 8631 (1970). On July 22, 1970, the letter of delegation was superseded, "[w]ithout derogating from any action taken thereunder", by section 3 of Exec. Order No. 11, 548, Delegating Functions of the President under the Federal Water Pollution Control Act., as amended. 35 Fed. Reg. 11677 (1970).

[183] 35 Fed. Reg. 15220, Env. Rep. 71: 5161.

[184] June 18, 1971.

[185] Establishing application fees, 35 Fed. Reg. 19638 (1970); amending the forms and requirements, 36 Fed. Reg. 3264 (1971); exempting non-self-propelled barges carrying no oil, 36 Fed. Reg. 4294 (1971); providing for issuance of master certificates and for painting certificate numbers on the bows of vessels where a certificate is not carried on the vessel, 36 Fed. Reg. 5704 (1971); and clarifying certain language in the uniform endorsement and the Certificate of Insurance regarding the maximum amounts of insurance which may be required, 36 Fed. Reg. 8259 (1971). There were no proposed rule making proceedings outstanding on June 18, 1971. A complete text of FMC General Order 27, as amended, appears in Env. Rep. 71: 5101. The relevant FMC Forms are set forth in Appendix B: (1) Application for Certificate of Financial Responsibility (Oil Pollution) (Form FMC-224); (2) Certificate of Insurance (Form FMC-225 (5/71)); (3) Oil Discharge Surety Bond (Form FMC-226 (9-70)); (4) Guaranty in Respect of Liability for Discharge of Oil (Form FMC-227 (9/70)); and (5) Sample Certificate of Financial Responsibility (Oil Pollution) (Form FMC-244 (10/70)).

[186] It was recently reported that the annual premium on a 225,000 dwt tanker valued at $25 million now runs $925,000. Two years ago the cost for the same vessel was one-third less at $625,000. Williams, Superport Setback: U.S. Ships Get Bigger, but Firms Face Hurdles in Bids to Enlarge Ports, Wall St. J., June 30, 1971, at 16, col. 1; see Horizon to Horizon, 13 Environment, March 1971, at 15.

187
While in the start-up phase, because of concomitant uncertainties, the Office of Oil Pollution Responsibility has to date kept its records manually.

188
On July 1, 1971.

189
The author counted 9,187 non-U.S. flag vessels over 1,000 gross tons (except passenger vessels) who were listed as being certified. The Maritime Administration listed 17,-633 non-U.S. flag merchant vessels over 1,000 gross tons on December 31, 1969. Office of Subsidy Admin., Maritime Admin., U.S. Dep't Commerce, Merchant Fleets of the World: Oceangoing Steam and Motor Ships of 1,000 Gross Tons and Over as of December 31, 1969 at 6 (1970). As of June 25, 1971, the Office of Oil Pollution Responsibility had received a total of 5,038 applications for certification covering 20,561 foreign and domestic vessels over 300 gross tons. Interview with Mr. Eliot Rosenheim, Office of Oil Pollution Responsibility, June 29, 1971. As of June 12, 1971, 4,639 certificates had been issued covering 15,426 foreign and domestic vessels over 300 gross tons, of which 2,984 vessels appear as single-ship corporations and 443 certificates listed only two vessels, 36 Fed. Reg.6618-60, 6849-58, 6916-21, 7576-82, 7998-8003, 8745-50, 9038-42, 9797-800, 10748-49, 10904-06, 11054 and 11483-84 (1971).

One reason why more foreign flag ships do not trade with the U.S. is because of the U.S. cabotage laws which prohibit trading between U.S. ports by other than U.S. flag vessels. Merchant Marine Act, 1920 § 27, 46 U.S.C. § 883, 41 Stat. 998; Shipping Act, 1916 § 9, 46 U.S.C. § 808 (1964).

190
Of the 162 tankers in the world in service as of May 27, 1971, over 200,000 dwt, all were of non-U.S. flag registry. Of that 162, 90 had been certified and three applications were pending, while the owners of 51 of those vessels had not applied. The seven largest tankers were not covered. A list of those tankers appear in Appendix C. Compilation by the author on July 1, 1971. The list of tankers was compiled from The Tanker Register 1971 at 15.

191
See note 189 supra.

192
36 Fed. Reg. 5751 (1971).

193 36 Fed. Reg. 5751 (1971); interview with Mr. Robert G. Drew, Chief, Office of Oil Pollution Responsibility, Bureau of Certification and Licensing, FMC, June 17, 1971; interview with CDR Daniel B. Charter, Jr., USCG, Maritime Pollution Control Branch, Office of Operations, Law Enforcement Division, USCG, June 9, 1971.

194 Interview supra note 193.

195 Ibid.

196 Ibid.

197 Interview with CDR Charter, supra note 193.

198 Interviews supra note 193.

199 WQIA §§ 11 (a)(5).

200 Text at notes 111 & 115 supra.

201 Text at note 175 supra.

202 Section 11 (p)(4) requires the study to be performed by the Secretary of Transportation. The Coast Guard is within his department.

203 Personal knowledge of the author.

204 WQIA, sec. 11 (p)(4).

205 Section 11 (p)(4) Report, supra note 79 at III.

206 §§ 11 (p)(4) Study at 5-17 to 18. The author participated in the drafting of this portion of the study.

207 §§11 (p)(4) Study at 7-6.

208 Id. at iii & 7-8.

209 It is not unworthy of note that this very subsection has already been amended--at the behest of the barge lobby--to exempt non-self-propelled barges not carrying oil as cargo of fuel. Sec. 120, Rivers and Harbors Act of 1970, Pub. L. No. 91-611, Dec. 30, 1970. The regulations have been changed accordingly. 36 Fed. Reg. 4293 (1971).

210 Note 186 supra.

211 See, e.g. Summary of Canadian Note of April 16, 1970, Tabled by the Secretary of State for External Affairs in the House of Commons, April 17, 1970, reprinted in 9 Int'l Legal Materials 607, at 614-15 (1970).

212 See, e.g., Wulf, Contiguous Zone for Pollution Control, supra note 10, at 48-81, & 166-89; W. Friedmann, The Future of the Oceans 44-45; Cundick, Oil Pollution: Intervention, supra note 10, at 63-76; Bilder, The Canadian Arctic Waters Pollution Prevention Act: New Stresses on the Law of the Sea, 69 Mich. L. Rev. 1 (1970); Henkin, Arctic Anti-Pollution: Does Canada Make--or Break--International Law? 65 Am. J. Int'l L. 131 (1971); Wilkes, International Administrative Due Process and Control of Pollution--The Canadian Arctic Waters Example, 2 J. Maritime L & Commerce 499 (1971).

213 Bilder, supra note 212, at 3-4. Descriptions of the first voyage during the summer of 1969 may be found in Keith, Across the Top, 96 U.S. Naval Inst. Proc., Aug. 1970, at 61; 1970 Marine Science Affairs 59-61; and T. Brown, Oil on Ice: Alaskan Wilderness at the Crossroads 86-91 (1971).

The second voyage during the summer of 1970 is briefly described in 1971 Marine Science Affairs 68.

A considerable literature has developed over the Alaskan oil development controversy. See, e.g., Moreau, Problems and Developments in Arctic Alaskan Transportation, 96 U.S. Naval Inst. Proc. Naval Review, May 1970, at 98; T. Brown, Oil on Ice: Alaskan Wilderness at the Crossroads (1971); Louis, Leon Hess Never Plays it Safe, Fortune, Jan. 1970, at 104; Main, The Hot Oil Rush in Arctic Alaska, Fortune, April 1969, at 120; Glaeser, A Discussion of the Future Oil Spill Problem in the Arctic, 1971 Oil Spills Conf. Proc. 479.

The owners of the S.S. Manhattan, Humble Oil & Refining Co, appear to have given up the project. Benedict, Costs to Keep Northwest Passage Shut; Jersey Standard Unit to Focus on pipeline, Wall St. J., Oct. 22, 1970, at 12, col. 3; Smith, Study Suspended on Use of North Slope Tankers, N.Y. Times, Oct. 22, 1970, at 71, col. 2; 1971 Marine Science Affairs 68; The Oil Import Question 227 n. 24; Earth Tool Kit 251.

Perhaps this explains why as of June 25, 1971, the implementing regulations for the Arctic Waters Pollution Prevention Act has not been issued. See note 280 infra.

[214] An Act to Amend the Territorial Sea and Fishing Zones Act, 18-19 Eliz. 2, c. 68 (Can. 1970). The text of the bill, C-203, as introduced, is reprinted in 9 Int'l Legal Materials 553 (1970).

[215] 9 Int'l Legal Materials 598.

[216] 18-19 Eliz. 2, c. 47 (Can. 1970) [hereinafter cited as the Arctic Waters Act]. The text of the bill, C-202, as introduced, is reprinted in 9 Int'l Legal Materials 543 and as enacted in 69 Mich. L. Rev. 38 (1970).

[217] Bill C-2, An Act to Amend the Canada Shipping Act, 3d. Sess., 28th Parl., 19-20 Eliz. 2, c. (Can. 1970). On March 1, 1971, the bill passed the House of Commons and received Royal Assent on March 30, 1971.

[218] Supra note 214, at §§ 3 (1).

[219] The documents promulgating the fisheries closing lines are reprinted in 10 Int'l Legal Materials 437-40 (1971). They were established effective December 18, 1970. The United States has strongly protested this unilateral act "which purports to extend unilaterally Canadian jurisdiction over areas which are traditionally regarded as the high seas." 64 Dep't State Bull. 139 (1971), 10 Int'l Legal Materials 441 (1971), 65 Am. J. Int'l L. 388 (1971).

[220] Arctic Waters Act, §§ 3 (100 miles seaward from the nearest Canadian Land).

[221] Ibid.

222
Id. §§ 11 (1).

223
Supra notes 64 & 66.

224
Oil Pollution Prevention Convention, Annex A. See maps in Hearings on S.1591 & S. 1604, Before Subcomm. on Air & Water Pollution of Sen. Comm. on Public Works, 90th. Cong., 1st.Sess., pt. 1, at 199-200 (1967). Under Article III of the 1969 amendments to this convention, the prohibited zones of Annex A are deleted and replaced by a 50 mile limit for tankers and for other covered vessels "as far as practicable from land".

225
See text infra at Chapter VI. Cf. Bilder, supra note 212,at 30.

226
Statement of the Head of Legal Division, Department of External Affairs, Mr. Beesley, on April 29, 1970, in Minutes of Proceedings and Evidence Before the House Standing Comm. on External Affairs and National Defense, No. 25, at 11 (April 29, 1970), quoted in Wulf, Contiguous Zones for Pollution Control at 69 and Bilder, supra note 212, at 21 n.80.

227
Statement of the Secretary of State for External Affairs, the Hon. Mitchell Sharp, 114 H.C. Deb. 6015 (April 17, 1970), quoted in Bilder, supra note 212, at 21 note 79. See also Wulf, supra note 10, at 66 text accompanying n. 172.

228
Background Notes on the Arctic Waters Pollution Prevention Bill and the Territorial Sea and Fishing Zones Bill (April 8, 1970) at 3, quoted in Bilder, supra note 212, at 21 n.79. The Standing Committee on Indian Affairs and Northern Development had previously indicated that in its view any passage which posed a threat of pollution was not innocent. H.C. Comm. on N. Devel., No. 1, at (Dec. 16, 1969), in Wulf, supra note 10, at 53-54.

229
Bilder, supra, note 212, at 22.

230
See text supra accompanying notes 58-59.

231
Arctic Waters Act §§ 8 (1)(d). No shipping safety control zone has yet been established.

232 Id. §§ 11 (1) & 3 (1).

233 Id. § 8 (1)(d).

234 Ibid.

235 Canada Shipping Act § 736 (2)(a) & (b).

236 "Pollutant" is defined in id. § 736 (1)(k):

(k) "pollutant" means:

(i) any substance that, if added to any waters, would degrade or alter or form part of a process of degradation or alteration of the quality of those waters to an extent that is detrimental to their use by man or by any animal, fish or plant that is useful to man, and

(ii) any water that contains a substance in such a quantity or concentration, or that has been so treated, processed or changed, by heat or other means, from a natural state that it would, if added to any waters, degrade or alter or form part of a process of degradation or alteration of the quality of those waters to an extent that is detrimental to their use by man or by any animal, fish or plant that is useful to man,

and without limiting the generality of the foregoing includes oil and any substance or any substance that is part of a class of substances that is prescribed by the Governor in Council, for the purposes of this Part, to be a pollutant.

"Oil" is defined in id. § 736 (1)(h):

(h) "oil" means oil of any kind or in any form and, without limiting the generality of the foregoing, includes petroleum fuel oil, sludge, oil refuse and oil mixed with wastes but does not include dredged spoil.

237 "In bulk" is defined in id. § 736 (1)(g) as follows:

(g) "in bulk, in relation to any pollutant carried on board a ship whether as cargo or otherwise, means

in a quantity that exceeds a quantity prescribed by the Governor in Council with respect to that pollutant by any regulation made pursuant to paragraph (p) of subsection (1) of section 739.

Canada Shipping Act §§ 739 (1)(g) states:

739. (1) The Governor in Council may make regulations

....

(p) prescribing quantities of pollutants for the purposes of paragraph (f) of subsection (1) of section 736 [relating to the Maritime Pollution Claims Fund.]

238
Id. §§ 745 (1)(a).

239
Id. §§ 745 (1)(b). The owner of the pollutant may be exempted under id. § 744 (3). The owner of a pollutant is required to have financial responsibility only if the pollutant is carried on a ship of a class designated as subject to the civil liability provisions. Id. §§ 745 (1)(b) & 743 (1)(b).

240
The financial responsibility requirements are to come into force by separate proclamation and only as to designated classes of ships. Act to Amend the Canada Shipping Act, supra note 217, at § 4.

241
See text infra at notes 382 & 391-406.

242
It should be noted that the financial responsibility requirements do apply in portions of the high seas adjacent to the Canadian coasts. They apply in arctic high seas shipping safety control zones, supra note 232, to any ship that "proposes to navigate or... navigates within" any such zone. Supra note 233. They also seem to apply in the Canadian exclusive fishing zones, Canada Shipping Act § 736 (2)(c), five of which have already been established, note 219 supra, to"the owner of any ship that carries a pollutant in bulk to or from any place in Canada", supra note 238. They do not appear to apply to Canadian arctic high seas areas not within shipping safety control zones, because the Arctic Waters Act does not require financial responsibility except in such zones, Arctic Waters Act § 8 (1)(d), and the Canada Shipping Act requires financial responsibility in only those arctic waters

which are "Canadian" and not within shipping safety control zones, Canada Shipping Act §§ 736(2)(b). "Canadian waters", as used in ibid., is not defined in Bill C-2; it is assumed that such term excludes high seas areas. It therefore appears that the Canadian claim to require financial responsibility of ships on the high seas is considerably broader than the U.S. claim, since the latter makes no such claim, not even applying the financial responsibility requirements in the U.S. contiguous zone. WQIA §§ 11(p)(1) & 11(b)(1). The legality of the Canadian pollution control claims on the high seas are considered in the sources cited in note 212 supra.

243
Arctic Waters Act §§ 6(1)(e)(does not apply to government damages other than those specified); Canada Shipping Act §§ 743 (1)(d) (applies to both government and all other persons).

244
Arctic Waters Act §§ 6(2); Canada Shipping Act §§ 743 (1)(c). It is unclear which act governs in arctic waters not within a shipping safety control zone. Cf. Canada Shipping Act §§ 736(2)(b).

245
Arctic Waters Act §§ 7 (1); Canada Shipping Act §§ 744(1).

246
Arctic Waters Act §§ 7(1).

247
Act of war, intentional act of a third person and governmental fault regarding navigational aids. Canada Shipping Act §§ 744(1)(b); Civil Liability Convention, art. III, par.2. It is equally unclear whether these latter defenses would be available in arctic waters not within shipping safety control zones.

248
Arctic Waters Act §§ 9.

249
Canada Shipping Act §§ 744(4); Civil Liability Convention, art. V., pars. 1-2.

250
Canada Shipping Act §§ 746.

251
Id. §§ 747-60.

252
Id. §§ 757-58.

253 Id. §§ 757(1).

254 Id. §§ 757(1).

255 Id. §§ 758(c).

256 Id. §§ 753-55, 760.

257 Id. §§ 736(2)(b).

258 The shipping safety control zones apparently would be established wherever shipping traffic was anticipated. Wulf, Contiguous Zones for Pollution Control 78 n.201.

259 IMCO Doc. LEG X/7, Annex I (Apr. 30, 1971).

260 For a further description of these draft articles see text infra at notes 421-25.

261 Eliz. 2, Ch. 21 (1971). The text is reproduced in 10 Int'l Legal Materials 584 (1971).

262 2 Marine Pollution Bull. 21 (1971).

263 64 Dep't State Bull. 304 (1971).

264 Acceptance deposited May 10, 1971. 64 Dep't State Bull. 812 (1971).

265 The Merchant Shipping (Oil Pollution) Bill was introduced in the House of Lords on January 15, 1971. Unfortunately the latest information available to the author dates only from February 9, 1971. 2 Mar. Pollution Bull. 21 (1971).

266 Ibid.

267 Text at note 420 infra.

268
McDougal & Burke 36 (italics in original). The decision-making process is given detailed exposition in id. at 36-51. The discussion which follows is based upon that work.

269
McDougal, Lasswell & Chen, Human Rights and World Public Order: A Framework for Policy-Oriented Inquiry. 63 Am. J. Int'l L. 237, 258 (1969).

270
McDougal & Burke 36.

271
Id. at 36-37.

272
Id. at 36-37.

273
Id. at 37-38.

274
Id. at 38-39.

275
The author has been unable to uncover any situations in which the United States has attempted to apply the financial responsibility requirements to a foreign flag ship merely passing through U.S. territorial seas. However the United States is requiring all vessels, including foreign flag vessels not destined for U.S. ports, desiring to pass through the Panama Canal to establish financial responsibility for oil pollution and denies passage through the canal until such proof is established. Interview with Mr. Robert G. Drew, Chief, Office of Oil Pollution Responsibility, Bureau of Certification and Licensing, Federal Maritime Commission, June 17, 1971. Mr. Drew reported that all such ships have complied with FMC regulations, generally within 36 hours.

276
No public protests over this claim have been uncovered by the author. This raises the question of the validity under international law of requiring financial responsibility as a condition of entry into and passage through "international waterways under special regimes" e.g., the Suez and Panama Canals, McDougal & Burke 1075, and international straits. There is need for additional research into these questions.

277
Notes 189-90 and accompanying text supra.

278
The text of the exchange of notes regarding this protest is reprinted in 9 Int'l Legal Materials 605-15 (1970).

279
The text of the U.S. statement appears in 64 Dep't State Bull. 139 (1971) and 10 Int'l Legal Materials 441 (1971). The Canadian announcement of the fishing closing lines appears in 10 Int'l Legal Materials 437 (1971). See text supra at note 219.

280
Private communications to the author from sources within the U.S. Government. Cf. Wilkes, Canada's Arctic Regulations, supra note 212, at 500, which indicates that "a team has already begun to draft the necessary regulations."

281
On June 26, 1970. Bilder, supra note 212,at 1.

282
See text supra accompanying notes 261-67.

283
A detailed examination of this aspect of that conference is set forth below at text accompanying notes 390-406.

284
The U.S. suggestion was contained in the U.S. protest to the Arctic Waters Pollution Prevention Bill and is reprinted in 9 Int'l Legal Materials at 606 (1970). The Canadian non-acceptance of this suggestion appears in summary of the Canadian Note of April 16, 1970, which is reprinted in 9 Int'l Legal Materials at 614.

285
The extensive work being doing in all areas of marine pollution is described in U.N. Secretary-General, The Sea, supra note 29. This document was prepared pursuant to G.A. Res. 2566, 24 U.N. GAOR Supp. 30, at 38, U.N. Doc. A/7630 (1969) and represents the most comprehensive compilation of the truly immense amount of work currently underway in the area of marine pollution. It summarizes the efforts of: 1) the following organizations of the United Nations system: FAO, UNESCO and its Inter-Governmental Oceanographic Commission (IOC), WHO, WMO, IMCO and IAEA. [id. at 65]; the specialized groups established under U.N. auspices: Joint Group of Experts on the Scientific Aspects of Marine Pollution (GESAMP) [id. at 82]; the Special Committee on Oceanic Research (SCOR) and the Group of Experts on Long-Term Scientific Policy and

Planning (GESAMP) established by the IOC, [id. at 67] and the Committee on Fisheries (COFI) of FAO [id. at 69]; 3) two of the main U.N. bodies: ECOSOC and the General Assembly [id. at 80-81]; 4) the non-governmental organizations concerned: International Union for Conservation of Nature and Natural Resources (IUCN), [id. at 67 note 110], International Association for Water Pollution Research (IAWPR), the International Association of Microbiological Societies (IAMS) and the International Law Association [id. at 69]; and 5) other intergovernmental organizations: North Atlantic Treaty Organization's Committee on the Challenges of Modern Society (NATO CCMS), the Organization for Economic Co-operation and Development (OECD), the Council of Europe, the International Council for the Exploration of the Sea (ICES) [id. at 67 note 110], the General Fisheries Council for the Mediterranean (GFCM), the International Commission for the Scientific Exploration of the Mediterranean (ICSEM) [id. at 69 note 114]. But see SCEP Report 247: "Our present view [is] that to date the inventory of existing organizations is far longer in names than in demonstrated resources, will, or appreciation of the functions to be performed or even of the problems and possibilities."

See Appendix D which contains a listing of the largest flag states' adherences to the Territorial Sea and 1954 Oil Pollution Prevention Conventions and signatures to the 1969 Civil Liability Convention.

[286]The details of that work are examined below in notes 413-24 and 450-89 and accompanying text.

[287]Text at note 283 supra.

[288]IMCO Doc. LEG X/7 at 20 (1971). See text at notes 421-24.

[289]IMCO Res. A. 176 (VI); IMCO Doc. A/CONF.48/PC/IWGMP.I/Inf. 7 (June 14, 1971). The U.S. considers IMCO as the appropriate forum for the pursuit of overall oil pollution conventions in the international sphere. Transcript of testimony of Russell E. Train, Chairman of the Council on Environmental Quality before the Consultative Subcomm. on Oceans and International Environment of the Sen. Foreign Relations Comm., May 20, 1971, at 131.

[290]See, e.g., Wash. Post, Dec. 12, 1970, at A15, col. 7;

id., Dec. 17, 1970, at A4, col. 7; Wulf, International Control of Marine Pollution, 25 JAG J.93 at 100 (1971); 1971 Marine Science Affairs 89.

291
G.A. Res. 2581 par. 12, 24 U.N. GAOR Supp.30, at 44, U.N. Doc. A/7630 (1969).

292
G.A. Res. 2750C par. 2, 25 U.N. GAOR Supp. , at , U.N. Doc. A/ (1970).

293
Ibid.; U.N. Sec'y General, The Sea, supra note 29, at 80-81. See Neuman, Oil on Troubled Waters: The International Control of Marine Pollution, 2 J. Maritime L. & Commerce 349, at 361 (1971).

294
See Report of the Second Sess. of the Preparatory Comm. for the U.N. Conf. on the Human Environment, U.N. Doc. A/CONF.48/PC.9 at 18-19 (1971). The U.S. currently does not view the Stockholm Conference as a negotiating body for any new international agreements on oil pollution. Transcript of testimony of U. Alexis Johnson, Under Secretary of State for Political Affairs, before the Consultative Subcomm. on Oceans and International Environment of the Sen. Comm. on Foreign Relations, May 20, 1971, at 105.

295
McDougal & Burke 39. See SCEP Report 249-54 for a view that the developing countries have a considerably smaller recognition of these interdependences than the developed countries.

296
Id. at 40.

297
Ibid.

298
Id. at 49.

299
Text accompanying notes 317-407 infra.

300
McDougal & Burke at 50-51.

301
Note 285 supra.

302
McDougal & Burke 51. The clarification of goals which follows is based on the framework set forth in id. 51-56.

303
Id. at 185.

304
Id. at 52.

305
This is evident from the wide acceptance of the concepts of inland waters, territorial sea, exclusive fishing zones, contiguous zones, and continental shelf embodied in the 1958 Geneva Conventions on the Law of the Sea. See Appendices D & E.

306
See text supra at notes 11-16.

307
1969 U.N. Stat. YB. at 396. Of the sixty nations, 23 had fleets of more than one million gross registered tons (grt) and 15 more had fleets between 500,000 grt and one million grt. Ibid.

308
Id. at 399-416 (provisional figures only). 147 countries were listed as having some international sea-borne shipping. The referenced tables list both vessels entered and cleared and goods loaded and unloaded in external trade. The figures for the vessels

> represents the sum of net registered tonnage of sea-going foreign and domestic merchant vessels (power and sailing) entered with cargo for or cleared with cargo to a foreign port and refer to only one entrance or clearance for each voyage. The data where possible excludes vessels "in ballast," i.e. entering without unloading or clearing without loading goods.

Id. at 407. Those tables show that 77 countries had vessels entering or leaving port totalling more than one million net registered tons in 1968.

309
E. Holmes, Freedom of the Seas, 22 Naval War Coll. Rev., June 1970, 4 at 6. Cargoes transported by air constituted less than three percent of the value of all international commerce. Ibid.

[310] McDougal & Burke 32.

[311] Id. at 185-87.

[312] Id. at 229.

[313] See, e.g., Arctic Waters Pollution Prevention Act, 18-19 Eliz. 2, c. 47 (Can. 1970) § 8; Canada Shipping Act., as amended by act of 3rd. sess. 28th. Parl, 19-20 Eliz. 2 § 745 (Royal Assent, Mar. 30, 1971).

[314] See, e.g., Canadian Prime Minister Trudeau's remarks on introduction in the House of Commons of the Arctic Waters Bill in 9 Int'l Legal Materials 600-04 and Canadian Note to U.S. Government of April 16, 1970, in id. 607-15.

[315] These same goals regarding pollution control in the contiguous zone are adopted in Wulf, Contiguous Zone for Pollution Control 94 and Cundick, Oil Pollution: Intervention 89.

[316] Text at notes 58-59 supra.

[317] See the sources cited in McDougal & Burke at 234 n.152 and 235 nn. 153-55.

[318] 2 Conference for the Codification of International Law, Bases of Discussion, Territorial Waters, League of Nations No. C.74.M.39.1929.V, at 65-91 (1929) [hereinafter cited as Bases of Discussion].

[319] From South Africa, id. at 65, Australia, ibid., Denmark, id. at 66, Finland, France & the United Kingdom, id. at 67, Italy & Norway, id. at 68.

[320] South Africa, Australia and the United Kingdom, supra note 63.

[321] Denmark: "security, public health, temperance, suppression of smuggling, etc."
Finland:"police and shipping regulations . . . security".
France: "security . . . shipping, fishing, the protection of buoys, health supervision and Customs inspection".
Italy: "general regulations for public order".
Norway: "safety of navigation, Customs inspection and health supervision".
McDougal & Burke are a little harsh in their reading of these replies when they write that "only three states saw fit to become specific about innocent passage." McDougal & Burke at 235.

[322] Bases of Discussion at 71.

[323] Ibid.

[324] Ibid.

[325] Acts of the Conference for the Codification of International Law, Minutes of the Second Committee, Territorial Waters, League of Nations No. C. 351 (b).M.145(b) .1930.V at 62, quoted in McDougal & Burke at 238.

[326]Minutes of the Second Committee at 63, quoted in McDougal & Burke at 238.

[327]Conference for the Codification of International Law, Final Act, League of Nations No. C.228.M.115.1930.V, article 6, at 16 (emphasis in the original) [hereinafter cited as Final Act].

[328]McDougal & Burke at 239. The controversy over the hovering laws arose in large measure because of this provision.

[329]Article 6, Final Act at 16.

[330]The Annex on the Legal Status of the Territorial Sea was adopted unanimously by the 24 nations represented at the Conference. These nations were: Union of South Africa, Germany, USA, Australia, Austria, Belgium, Brazil, Great Britain, Canada, Egypt, Spain, Estonia, Finland, France, Greece, Hungary, Mexico, Nicaragua, Norway, The Netherlands, Peru, Poland, Portugal and Yugoslavia. Final Act at 19-26.

[331]McDougal & Burke at 241.

[332]Article 6, Final Act.

[333]McDougal & Burke at 241.

[334]Conference for the Codification of International Law, Report of the Second Commission [sic, Committee] (Territorial Sea), League of Nations No. C.230.M.117.1930.V, at 8 (1930) [hereinafter cited as Report of Second Committee].

[335]Ibid.

[336]McDougal & Burke at 242.

[337]Ibid.

[338]Id. at 247.

[339] Id.

[340] U.N. Doc. A/CN.4/61.

[341] 1 Y.B. Int'l L. Comm'n 104-06, U.N. Doc. A/CN.4/SER.A (1954) [hereinafter cited as 1954 ILC YB I].

[342] McDougal & Burke at 248-49.

[343] 1954 ILC YB I at 106.

[344] 1 Y.B. Int'l L. Comm'n 253, U.N. Doc. A/CN.4/SER.A (1955) [hereinafter cited as 1955 ILC YB I].

[345] 1955 ILC YB I at 253-54.

[346] One amendment, although agreed upon at the 325th meeting, id. at 254, was not incorporated in the article which was adopted as a whole at that meeting, but was incorporated in the final article adopted at the 329th meeting of that session, id. at 281.

[347] Id. at 254.

[348] Report of the Int'l L. Comm'n for the Eighth Session, 11 GAOR Supp. 9, U.N. Doc. A/3159 at 19 (1956).

[349] Article 18 (final draft), Commentary (2)(b), id. at 20.

[350] McDougal & Burke at 248.

[351] Id. at 249.

[352] 1 Y.B. Int'l L. Comm'n at 200-01, U.N. Doc. A/CN.4/SER.A (1956) [hereinafter cited as 1956 ILC YB I].

[353] Id. at 201.

[354]Report of the Int'l L. Comm'n for the Fifth Session, supra note 92, at 19.

[355]2 Y.B. Int'l L. Comm'n at 72, U.N. Doc. A/CN.4/SER.A/1953/Add.1.

[356]1954 ILC YB I at 120.

[357]Id. at 121.

[358]Report of the Int'l L. Comm'n for the Sixth Session, U.N. Doc. A/2693, 2 Y.B. Int'l L. Comm'n at 159, U.N. Doc. A/CN.4/SER.A/1954/Add.1.

[359]1955 YB ILC I at 255.

[360]Report of the Int'l L. Comm'n for the Seventh Session, U.N. Doc. A/2934, in 2 Y.B. Int'l L. Comm'n at 40, U.N. Doc. A/CN.4/SER/1955/Add.1.

[361]1 Y.B. Int'l L. Comm'n at 203-06, U.N. Doc. A/CN.4/SER.A/1956 [hereinafter cited at 1956 YB ILC I].

[362]By India (traffic in arms), id. at 203, Turkey (submarines), ibid., South Africa (flying the national flag, navigation routes, public order, security, customs and sanitary regulations), id. at 204.

[363]Id. at 206.

[364]Mr. Spiropoulos stated "it was therefore obvious that foreign vessels were obliged to comply with the laws and regulations of the coastal state, provided they were in conformity with the rules of international law." Id. at 205 par. 17 (emphasis added). Sir Gerald Fitzmaurice (UK) agreed with this statement: "The other laws and regulations enacted by the coastal State in conformity with rules of international law would, of course, continue to apply." Id. at 205 par. 30 (emphasis added). "The right of innocent passage did not imply that foreign vessels exercising the right were not sub-

ject to the laws of the coastal State so far as that was required by international law." Id. at 206 par. 37 (emphasis added).

[365] Report of the Int'l L. Comm'n for the Eighth Session, supra note 92, at 20.

[366] Sir Fitzmaurice approved Mr. Sandstrom's comment that the distinction between article 16 [meaning of the right of passage] was that in the former, irrespective of any act of the vessel in the territorial sea, passage could be refused on the grounds that it was not innocent. Under the latter article, a right or passage existed and could not be withheld, although penalties could be imposed for any infringement of the coastal State's regulations during that passage. 1956 YB ILC I at 201 par. 74.

[367] Report of the Int'l Law Comm'n for the Eighth Session, supra note 92, at 19. For a more detailed argument in support of this position see McDougal & Burke at 249-50.

[368] McDougal & Burke at 251.

[369] Article 14 par. 4, Territorial Sea Convention.

[370] McDougal & Burke at 252-53.

[371] Id. at 253.

[372] Id. at 254.

[373] Ibid.

[374] Mr. Yingling (US): "The second sentence of [article 14 par. 4, as adopted] was meant to indicate that a ship in innocent passage must conform to the laws and regulations of the coastal State. However, such laws and regulations could not prohibit innocent passage. 3 U.N. Conference on the Law of the Sea, Official Records at 83 par. 23, U.N. Doc. A/CONF.13/39 [hereinafter cited as 3 Official Records].

Sir Fitzmaurice: "I distinguished between the concept of innocence of passage and that of the obligation of a vessel in passage to conform to the laws and regulations of the coastal State." Id. at par. 25.

375 Id. at 75-76, 83-85.

376 McDougal & Burke at 258.

377 Article 15 par. 3, ILC draft.

378 U.N. Doc. A/CONF. 13/C.1/L.28, 3 Official Records: First Committee at 216.

379 Ibid.

380 Id. at 76 par. 26.

381 Ibid.

382 McDougal & Burke at 258. Indeed, opposing arguments were made that this change would permit the mere fact of passage as such to be considered non - innocent, rather than to permit prohibition only for specific conduct during passage. 3 Official Records at 83 pars. 27-28, 35.

383 U.N. Doc. A/CONF.13/C.1/L.37 & Corr. 1 (1958) in 3 Official Records: First Committee at 219.

384 3 Official Records at 80 - 81.

385 Id. at par. 26.

386 Id. at 101.

387 Id. at 102.

388 Id. at 109.

[389]See above for a discussion of what can be learned from those discussions regarding state's rights in the territorial sea in pollution control generally.

[390]*Infra* note 416.

[391]IMCO Doc. LEG/CONF/C.2/WP.22/Rev. 1, at 6.

[392]See *infra* text at notes 419-20.

[393]IMCO Doc. LEG/CONF/C.2/WP.46 (Nov. 25, 1969). The language shown includes clarifying verbal amendments made during discussion of this amendment during the committee meeting on November 25, 1969. See also *infra* text following note 405.

[394]Including these three, they are, in decending order of number of ships and deadweight tonnage: Japan, United Kingdom, USSR, Liberia, Norway, Greece, USA, West Germany, Italy, Panama, France, Netherlands, Sweden, Spain and Denmark. *Naval Review 1971*, 97 *U.S. Naval Inst. Proc.*, May 1971, at 353, *compiled from Merchant Fleets of the World*, *supra* note 189.

[395]IMCO Doc. LEG/CONF/C.2/WP.46.

[396]Statement of Spanish delegate, Mr. de Paramo Canovas, IMCO Doc. LEG/CONF/C.2/SR.20 at 5.

[397]*Ibid.*

[398]*Id.* at 5, 7-8.

[399]*Id.* at 7.

[400]*Id.* at 6.

[401]*Ibid.*

[402]*Id.* at 7.

[403] Ibid.

[404] The vote by states, as well as positions for and against the amendment, are listed in a chart in Appendix F.

[405] IMCO Doc. LEG/CONF/C.2/2, Annex at 9 (Nov. 26, 1969).

[406] Handwritten notes of Louis P. Georgantas, Office of Legal Advisor, U.S. Dep't of State, Delegate to the Conference, on file in the Office of the Legal Advisor, U.S. Dep't of State; handwritten notes of RADM William L. Morrison, USCG, Chief Counsel U.S. Coast Guard, Delegate to the Conference, on file in the Office of the Chief Counsel, Headquarters U.S. Coast Guard.

No record of the floor debate or roll call vote, if any, on this amendment was available to the author. However Mr. Neuman was asked by the author for his recollection of this question. He recalled that

> the United States delegation discussed the matter with the sponsors of the amendment, and ultimately persuaded France and Spain to withdraw their support leaving only the UAR as sponsor. With the withdrawal of Spain and France, there were enough votes switched to defeat the amendment. I further recall that France and Spain, in the final voting, abstained.

Letter from Mr. Neuman to the author, May 24, 1971 in the author's possession.

Mr. Neuman recalls that the U.S. position on the amendment was that it

> would constitute unwarranted interference with the principle of innocent passage through the territorial sea, to the extent that vessels registered under the flag of non-contracting states would be affected. Ibid.

[407] Cf. letter from Mr. Neuman, supra note 406.

[408] Text accompanying note 190 supra.

[408a] It is interesting to note that in 1969 the U.S. Coast Guard estimated that half the world's foreign tankers entered U.S. parts annually. Water Pollution 1969, pt. 4, at 939.

[409] International efforts prior to 1954 were unproductive of significant international agreement. Secretariat of the United Nations, Memorandum: Pollution of the Sea by Oil, U.N. Doc. A/CONF. 13/8 (1957) in 1 U.N. Conference on the Law of the Sea, Official Records: Preparatory Documents 169, U.N. Doc. A/CONF.13/37 (1958). They are summarized in the text infra at notes 443-46.

[410] Supra note 64.

[411] Supra note 66. Forty two countries representing 95 percent of the world's shipping tonnage are parties to the 1954 Oil Pollution Prevention Convention as amended in 1962. U.N. Sec'y General, The Sea 56; Dep't of State, Treaties in Force 324 (1971) [herinafter cited as 1971 Treaties in Force].

[412] The Torrey Canyon went aground in international waters on March 18, 1967 on the Seven Stones Reef about 16 miles off Land's End in the English Channel. The super-tanker carried 110,228 tons of Kuwait crude oil. Six tanks were breached by the grounding spilling about 30,000 tons of oil into the sea and spawning an oil slick 100 square miles in area toward the British and Franch coasts. After 12 days of unsuccessful savalge attempts, the tanker was bombed freeing another 90,000 tons of crude. The slicks reached the Britany coast 110 miles away from the grounding and as far as Normandy, 275 miles from the Seven Stones Reef. The tanker finally sank in place. Committee of Scientists, Cabinet Office, United Kingdom, Report: The Torrey Canyon (1967); Secretary of State for the Home Dep't, Report to the Parliament: The Torrey Canyon, Cmnd. 3246 (Eng. 1967); E. Cowan, Oil and Water, The Torrey Canyon Disaster (1968); P.Petrow, In the Wake of Torrey Canyon (1968); C.Gill, F. Booker & T. Soper, The Wreck of the Torrey Canyon (1967). See also, Marshall, The Black Wake of the Torrey Canyon, 93 U.S. Naval Inst. Proc., Dec. 1967, at 38; Wilson, The Black Tide of the Torrey Canyon, id. at 133. Legal analysis of the incident may be found in Sweeney, Oil Pollution of the Oceans, 37 Fordham L. Rev. 155 (1968), in 33 ATL L.J. 289 (1970); Nanda, The Torrey Canyon Disaster: Some Legal Aspects, 44 Denver L.J. 400 (1967); IMCO Legal Comm., Report Concerning the 'Torrey Canyon' Question, IMCO Doc. A/ES.IV/5 (1968).

[413] The history, structure and work of IMCO through mid-1966 may be found in Goddu, IMCO: An Assistance to the American Merchant Marine, 92 U.S.Naval Inst. Proc., Dec. 1966,

at 71. A concise but comprehensive account of IMCO's recent work may be found in Price, International Activity Regarding Shipboard Oil Pollution Control, in 1971 Oil Spills Conf. Proc. 27-42.

[414] Amendments to the International Convention for the Prevention of Pollution of the Sea by Oil, 1954, adopted at Brussels Oct. 21, 1969, Sen. Ex.G, 91st Cong., 2d Sess. at 29. A composite of the convention as amended in 1962 and 1969 appears in 9 Int'l Legal Materials 45 (1970). They have been accepted as of June 1971, by the Malagasy Republic (on Jan. 22, 1971), 64 Dep't State Bull. 304, and the United Kingdom (on May 10, 1971), 64 Dep't State Bull. 812 (1971).

[415] International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, done at Brussels,Nov. 29, 1969, Sen. Ex. G, 91st Cong., 2d Sess. 9 (1970), 9 Int'l Legal Materials 25 (1970), 64 Am. J. Int'l L. 471 (1970), 1 J. Maritime L. & Commerce 367 (1970), Sec'y of State, United States Foreign Policy 1969-1970: A Report 558 (1971) [hereinafter cited as Intervention Convention]. Thirty states signed the convention while it remained open for signature. See the list in Appendix G. After December 31,1970 the convention remained open for accession. Intervention Convention, art. IX. par. 1. No accessions are reported in Dep't State Bull. through June 1971. The convention was ratified by Great Britain on January 12, 1971. 64 Dep't State Bull. 304 (1971).

[416] International Convention on Civil Liability for Oil Pollution Damage, done at Brussels, Nov. 29, 1969, Sen. Ex. G, 91st Cong., 2d Sess. 19 (1970), 9 Int'l Legal Materials 45 (1970), 64 Am. J. Int'l L. 481 (1970), 1 J. Maritime L. & Commerce 373 (1970), Sec'y of State, United States Foreign Policy 1969-1970: A Report 569 (1971) [hereinafter cited as Civil Liability Convention]. Twenty nine states signed this convention while it remained open for signature. See the list in Appendix H. After December 31, 1970 the convention remained open for accession. Civil Liability Convention, art. XIII, par.1. No accessions or ratifications are reported in Dep't State Bull. through June 1971.

Both the Intervention Convention and the Civil Liability Convention and the amendments to the 1954 Oil Pollution Prevention Convention, supra note 414, were submitted by the President to the Senate for advice and consent on May 20, 1970. Sen. Ex. G at 1, 62 Dep't State Bull. 756 (1970). Because of differences between these conventions and the WQIA, hearings

on them were first held by the Air and Water Pollution Subcommittee of the Senate Public Works Committee, on July 21 and 22, 1970. IMCO Civil Liabilities Conventions (Oil Pollution), Hearings before the Subcomm. on Air & Water Pollution of the Sen. Comm. on Public Works, 91st Cong., 2d Sess. (1970).

On February 8, 1971 the President again requested advice and consent to these conventions and amendments. President's Message to the Congress on the Environment, Feb. 8, 1971, H.R. Doc. No. 92-46, 92d Cong., 1st Sess. 7 (1971), in Council on Environmental Quality, The President's 1971 Environmental Program 9 (1971). The President indicated his intention to withold ratification of the Civil Liability Convention until the supplementary convention to establish an International Compensation Fund can also be brought into force at the same time. Ibid.

Hearings on the conventions and the amendments were held by the Senate Foreign Relations Consultative Subcommittee on Oceans and International Environment on May 20, 1971, the anniversary of their submission to the Senate. Wash. Post, May 20, 1971, at A4, col. 1, 2 Env. Rep. 98-99 (1971). At those hearings Senator Muskie submitted for the record a letter from him to Senator Fulbright dated May 17, 1971, endorsed by the members of the Senate Public Works Committee, indicating their concern with the Civil Liability Convention but recommending Senate concurrence in the convention coupled with withholding Senate action pending successful negotiation of the supplementary convention. Absent a satisfactory supplementary compensation convention the Senate Public Works Committee did not support the Civil Liability Convention standing alone. Also submitted by Senator Muskie for that record were copies of his Subcommittee's evaluation of the Civil Liability Convention in comparison with the WQIA § 11, a letter from the Deputy Attorney General to Senator Muskie, April 15, 1971, replying to the questions raised in that evaluation; a letter from Senator Muskie to the Secretary of State, May 6, 1971, posing questions regarding the supplementary compensation convention; and the State Department letter reply to Senator Muskie, May 14, 1971. In none of these documents is the question of innocent passage and financial responsibility raised.

Senator Muskie also submitted a statement dated May 20, 1971 for the record of those hearings. In that statement he said:

> I am concerned about another aspect of the pending Convention and the proposed supplementary treaty. At the present time there is major tanker traffic along the coast of Maine to the Bay of Fundy, Canada.

> . . . . I do know that without Canada's participation in this and future oil pollution conventions, the coast of Maine, the coast of Rhode Island, and in fact the coast of all of New England will be threatened by catastrophic oil spills from tankers in innocent passage without any way to recover the cost of clean-up of those spills. Federal and State laws, no matter how strict, will not deal with spills from vessels in innocent passage.

He then recommended:

> initiation of bilateral negotiations between the United States and Canada to establish interim protection of United States and Canadian waters from oil spills which may occur from vessels in innocent passage to and from the United States and Canada. Canada has an interest in such negotiations because of the proposed transfer of oil by tanker from Alaska to the West Coast. The United States interest relates to the transfer of Middle Eastern and Venezuelan oil to the Bay of Fundy and through the St. Lawrence Seaway.

Statement of May 20, 1971, at 3-4. Senator Muskie did not read this statement to the subcommittee and the transcript of the hearings revealed no dicussion of these points took place.

At the full day of hearings, testimony was received from industry, conservationist and State Department witnesses. Together with the vocal support of the subcommittee's chairman, Senator Pell, all the witnesses indicated support for one or both of the conventions and the amendments. None spoke against ratification. Mr. James J. Reynolds of the American Institute of Merchant Shipping supported the Civil Liability Convention and the 1969 Amendments but took no position on the Intervention Convention. Transcript of Hearing 8. Mr. Herbert A. Steyn, Jr. from the American Petroleum Institute indicated support for the Civil Liability Convention but also had no position on the Intervention Convention. Id. 32. Mr. Roland C. Clement of the National Audubon Society and Dr. Eugene V. Coan of the Sierra Club supported all three agreements, the Civil Liability Convention conditioned on the successful negotiation of a supplementary compensation convention. Id. 58-59 & 67-72. Professor L.F.E. Goldie supported all three agreements, id. 77, and recommended that the Civil Liability Convention be reported out favorably to show U.S. support for the supplementary convention and to gain Canadian support for both conventions. Id. at 78. The Hon. U. Alexis Johnson, Under Secretary of State for Political Affairs, gave strong support for all three agreements. Id. 88.

The Hon. Russell Train, Chairman of the Council on Environmental Quality, also gave Administration support. Id. 124. RADM William J. Morrison, USCG, Chief Counsel for the Coast Guard gave strong and detailed arguments in favor of the Intervention Convention and the 1969 Amendments. Id. 142 et seq. Mr. Fitzhugh Green, Director of International Affairs, Environmental Protection Agency gave EPA unreserved support for all three agreements. Id. 185

The United States is taking action to apply the rules of the 1969 Amendments to its own vessels without waiting for them to come into force. RADM Morrison stated that the necessary legislation to amend the 1961 Oil Pollution Act, supra note 1, is within the clearing process within the Administration. Id. 148. Russel Train concurred with RADM Morrison's testimony. Id. 127. This action is being taken pursuant to the policy announced in the President's Message to the Congress on Oil Pollution, May 20, 1970, H.R. Doc. No. 91-340, 91st Cong., 2d Sess., 62 Dep't State Bull. 754, Env. Rep. 21:0241 (1970).

[417]Civil Liability Convention, art. VII, par. 1. That limit of liability is about $134 per gross registered ton with maximum of $14 million. Id., art. V, par. 1.

[418]Id.,art. VII, pars. 6 & 7.

[419]Id.,art. VII, par. 10.

[420]Id.,art. VII, par. 11 (emphasis added).

[421]See Sen. Ex. G, 91st Cong., 2d Sess. at 45-46 (1970).

[422]IMCO Doc. LEG X/7, Annex I (Apr. 30, 1971). The U.S. State Department participated in the drafting of these Draft Articles. Sec'y of State, United States Foreign Policy 1969-1970: A Report 251 (1971). The United States is supporting higher limits of $50 to $100 million. Transcript of testimony of U. Alexis Johnson, supra note 416, at 100.

[423]International Convention on Limitation of Liability of Seagoing Ship Owners, in force May 31, 1968, 1957 AMC 1972 reprinted in 6A A. Knauth & C. Knauth, Knauth's Benedict on Admiralty 636 (7th ed. rev. 1969) (not in force for the U.S.). See the comments of Senator Muskie supra note 416.

[424]Draft Article 5, par. 1, IMCO Doc. LEG X/7, Annex I, at 7.

[425]The tenth session of the IMCO Legal Committee agreed the Draft Articles should be submitted to the conference and requested, subject to required approval of the IMCO Council, the IMCO Secretary-General to issue invitations to attend the diplomatic conference to adopt such a convention. IMCO Doc. LEG X/7 at 20 (Apr. 30, 1971).

[426]Section 11 (p) (4) Study at 8-9 to 8-11.

[427]Tanker Owners' Voluntary Agreement Concerning Liability for Oil Pollution is set forth in Hearings on S.7 & S.544 Before Subcomm. on Air & Water Pollution of the Sen. Public Works Comm., 91st Cong., 1st Sess., ser. 91-2, pt. 1 at 261-65 (1969); 8 Int'l Legal Materials 497 (1969).

[428]Contract Regarding an Interim Supplement to Tanker Liability for Oil Pollution, reprinted in 10 Int'l Legal Materials 137 (1971) and 2 J. Maritime L. & Commerce 705 (1971). See Wash. Post, Jan. 15, 1971, at A3, col. 1; id. Dec. 15, 1970, at A10, col. 1.

[429]Oil Insurance Limited, Wash. Post, Jan. 15, 1971, at A3, col. 1; §§ 11 (p) (4) Study at 8-11.

[430]Wash. Post, Jan. 14, 1971, at A3, col. 1; 19 The Orange Disc., Mar.-Apr. 1971 at 32.

[431]§§ 11 (p) (4) Study at 8-9; Water Pollution---1969 at 257-65.

[432]19 The Orange Disc, Mar.-Apr. 1971, at 32.

[433]§§ 11 (p) (4) Study at 8-10.

[434]Ibid.

[435]1971 Marine Science Affairs 88.

436
Ibid.

437
Secretary of Transportation John Volpe introduced the subject as the major topic of his speech at the opening session of the conference. The speech appears in 63 Dep't State Bull. 666 (1970)

438
63 Dep't State Bull. 669 (1970); Wash. Post, Nov. 7, 1970, at A12, col. 8. Even the environmentalists recognize and support this approach as "a major step toward eliminating ocean pollution." Earth Tool Kit 257.

439
Sec'y of State, United States Foreign Policy 1969-1970: A Report 530-31; 1971 Marine Science Affairs 89.

440
1971 Marine Science Affairs 89; President's Message to the Congress on the Environment, Feb. 8, 1971, H.R. Doc. No. 92-46, 92d Cong., 1st Sess. 7 & 17.

441
Text at notes 291 and 292 supra.

442
See note 293 supra.

443
Report of the 1926 Conference quoted in Price, International Activity Regarding Shipboard Oil Pollution Control, 1971 Oil Spill Conf. Proc. 27, at 28n.

444
Id. at 28.

445
See testimony of RADM William L. Morrison, USCG, Chief Counsel of U.S. Coast Guard, in transcript of Hearings on Sen. Ex. G, 91st Cong, 2d Sess. Before Consultative Sub-comm. of Oceans and the International Environment of the Sen. Foreign Relations Comm., 92d Cong., 1st Sess., supra note 416, at 148 (May 20, 1971).

446
Price, supra note 443, at 28; Pollution of the Sea by Oil, supra note 409, at 169-70.

[447]Res. No. 1, 1954 International Conference on Pollution of the Sea by Oil, in Water Pollution - 1967, at 126.

[448]Wilkes, State Jurisdiction over Oil Spills in a Federal System, in 1971 Oil Spills Conf. Proc. 57, at 67. Accord, Blumer, Scientific Aspects of the Oil Spill Problem, 1 Environmental Affairs at 64 & 69.

[449]Transcript of testimony of Mr. James J. Reynolds, supra note 416, at 20.

[450]1958 Y.B. of the U.N. 501 (1959).

[451]See 1960 Y.B. of the U.N. 679-80 (1961).

[452]See 1962 Y.B. of the U.N. 641 (1964).

[453]As of January 1, 1971. Treaties in Force 323.

[454]Price, supra note 443, at 29.

[455]Convention on the Intergovernmental Maritime Consultative Organization, done at London March 6, 1948, in force for U.S. Mar. 17, 1958, 9 U.S.T. 621, T.I.A.S. No. 4044, 289 U.N.T.S. 48, as amended Sept. 28, 1965, in force for U.S. Nov. 3, 1968, 19 U.S.T. 4855, T.I.A.S. No. 6409, U.N.T.S. .

[456]Price, supra note 443, at 36.

[457]Id. at 29.

[458]Ibid.

[459]Ibid.

[460]Ibid.

[461] Id. at 30.

[462] International Convention of Load Lines, 1966, done at London, April 5, 1966, in force for U.S. July 21, 1968, 18 U.S.T. 1875, T.I.A.S. No. 6331, U.N.T.S. .

[463] Price, supra note 443, at 30; 1967 Y.B. of the U.N. 918 (1969).

[464] Price at 36-37; see U.N. Sec'y General, The Sea, supra note 29, at 76.

[465] This agreement entered into force August 9, 1969 and is reprinted in 9 Int'l Legal Materials 359 (1969).

[466] Price at 37; see U.N. Sec'y General, The Sea, at 76.

[467] See text infra at note 473 and Appendix I for a list of Traffic Separation Schemes.

[468] International Regulations for Preventing Collisions as Sea, June 17, 1960, in force for the U.S. Sept. 1, 1965, 16 U.S.T. 794, T.I.A.S. No.5813. Fifty-nine countries are party to these regulations. 1971 Treaties in Force 325.

[469] That convention is discussed briefly in the text supra at notes 421-25.

[470] U.N. Sec'y General, The Sea, supra note 29, at 77. The first recommendation is apparently in compliance with IMCO Assembly Res. A/160 (ES.IV).

[471] Price, supra note 443, at 31.

[472] Id. at 31-32.

[473] Id. at 32. They are listed in Appendix I. The concept is supported in Higbee, Overdue Aids to Navigation,

97 U.S. Naval Inst. Proc., July 1971 at 104.

[474]Six additional schemes were considered at the July meeting of the Subcommittee on Safety of Navigation. IMCO Doc. Nav. XI/3 (May 3, 1971); interview with CDR Carmen Blondin, USCG, Maritime Law Division U.S.C.G. Headquarters, July 16, 1971, delegate to that meeting.

[475]See Wash. Post, Jan. 11, 1971 at A11, col. 1.; id. Jan. 12, 1971 at A3, col. 1; id., Jan. 13, 1971, at A3, col. 1; id., Jan. 14, 1971, at A7, col. 1; id., Jan, 24, 1971, at G11, col. 4; 2 Marine Polution Bull. 20-21 (1971). For brief accounts of later tanker collisions in the English Channel, see Wash. Post, Apr. 4, 1971, at L8, col.4; id., Apr. 9, 1971, at A16, col. 1; id., April 10, 1971, at A18 col. 6; and id., April 11, 1971 at A24, col 11.

[476]See text at notes 471-72 supra.

[477]Price, supra note 443, at 32-33; U.N. Sec'y General, The Sea, supra note 29, at 77. These proposed amendments appear in Appendix J.

[478]U.N. Sec'y General, The Sea at 76.

[479]Ibid.

[480]Id. at 77.

[481]These decisions appear in U.N. Doc. A/CONF.48/PC/IWGMP.I/Inf.7 (June 14, 1971) and are noted briefly in U.N. Sec'y General, The Sea at 78-79.

[482]U.N. Doc. A/CONF.48/PC/IWGMP.I/Inf.7 at 2. Suggested practical means to achieve this goal include revision of the definition of "oil" in the convention; design and construction of tankers and other ships to keep oil and water separate by clean ballast systems, barriers or otherwise; development of oily water separators and oil content meters to permit substantially total elimination and automatic control of oil emission; provision of special stations to clean oil tanks after unloading; providing adequate shore reception facilities

and ships equipment to permit discharge of dirty ballast while taking on cargo, thereby eliminating delays; and providing adequate port facilities and fitting ships with adequate sludge tanks to receive oily residues from purification of fuel and lubricating oil. Id. at 2-3.

[483] Id. at 3.

[484] Id. at 4.

[485] Id. at 5.

[486] Id. at 6.

[487] See IMCO Res. A/153 (ES.IV), text following note 465 supra.

[488] U.N. Doc. A/CONF.48/PC/IWGMP.I/Inf.7 at 7.

[489] Id. at 8.

[490] Lehr, Coast Guard Activities in Pollution Control, 5 Environmental Science & Technology 512 (June 1971). See also text at notes 448-49 supra.

A flow chart diagram of the stages of oil spillage prevention, control and restoration appears in Swift, Touhill, Templeton & Roseman, Oil Spillage Prevention, Control, and Restoration---State of the Art and Research Needs, Oil Pollution: Problems and Policies, supra note 22, at 36-37.

[491] Catoe & Orthlieb, Remote Sensing of Oil Spills, 1971 Oil Spills Conf. Proc. 71.

[492] Melpar, Oil Tagging System Study (1970).

[493] Ibid.; Landowne & Wainwright, A Chemical Tagging System for Use in the Prevention of Oil Spills, 1971 Oil Spills Conf. Proc. 179.

494 Hammer, Prevention of Marine Pollution Through Understanding, id. at 97. An outline of the subjects covered in this particular program appears in Appendix K.

495 See Putman, Causes of Oil Spills from Ships in Port, id. at 199, 200-201.

496 Leonard, Development of Tank Vessel Overfill Alarm Instruments, in id. at 103.

497 Lockwood & Norris, Use of a Gravity Type Oil Separator for Tanker Operations, in id. at 109; 1971 Marine Science Affairs 20 & 67. The load-on-top system is described in Water Pollution--1967, pt. 1, at 204-05 and Comment, Oil Pollution of the Sea, 10 Harv. Int'l L. J. 316, 351-52 (1969). The SCEP Report states:

> Tankers in their normal operations . . . are estimated to account for some 530,000 metric tons per year of oil discharged into the oceans. Of this, approximately 500,000 metric tons are derived from tankers in the world's fleet that do not employ . . . "Load on Top" (LOT). Tankers using LOT are responsible for only 30,000 metric tons. Yet the tankers using LOT constitute 80 percent of the world's fleet . . . If the 20 percent not using LOT should adopt it, their discharges would be reduced . . . to 7,500 metric tons per annum, and the aggregate of oil discharged into the world's oceans from this source would be correspondingly reduced from 530,000 metric tons per annum to 37,500 metric tons per annum . . . In technological terms the appropriate remedial measure appears to be clearly indicated. The difficulty lies . . . in the means of bringing about its use.

SCEP Report at 240-41 & 267. One working group suggested unilateral action by the United States to exclude tankers not employing LOT from its ports "should not be excluded by the United States from its survey of available choices," id. at 242, while another recommended more effective international control measures to ensure its use. Id. at 144.

498 Ketchel & Smith, Development of an Air Deliverable Antipollution Transfer System including the Development of an Optimum Oil Storage Container, 1971 Oil Spills Conf. Proc. 165; Lehr, Coast Guard Activities in Pollution Control, 5 Environmental Science & Technology at 515-16; 1971 Marine Science Affairs 20.

[499] Marx, Gulse & Hirshorn, Theoretical and Experimental Evaluation of Oil Spill Control Devices, 1971 Oil Spills Conf. Proc. 393 & 402.

[500] Ibid.; cf. N.P.C., Environmental Conservation 28.

[501] See, e.g., March, "Dynamic Keel" Oil Containment System, 1971 Oil Spills Conf. Proc. 369; Basco, Pneumatic Barriers for Oil Containment Under Wind, Wave, and Current Conditions, in id. at 381; Lehr, supra note 498, at 516.

[502] Oxenham, A Study of the Performance Characteristics of the Oleophilic Belt "Oil Scrubber," 1971 Oil Spills Conf. Proc. 309; Lenager, Walkup, Blacklaw & Smith, Study of Equipment and Methods for Removing or Dispersing Oil From Open Waters, id. at 405; Kator, Oppenheimer & Miget, Microbial Degradation of a Louisana Crude Oil in Closed Flasks and under Simulated Field Conditions, in id. at 287; Vaux, Weeks & Walukas, Oil Spill Treatment with Composted Domestic Refuse, in id. at 303; Lehr, supra note 498, at 516; Office of Naval Research News Release, Mar. 30, 1970, in 96 U.S. Naval Inst. Proc., June 1970, at 134; Wash. Post, Nov. 19, 1970, at A1, col. 1; Phila. Inquirer, Nov. 26, 1970, at 7 col. 4.

[503] Jeffery, The Development of Test Procedures for the Assessment of Efficiency in Beach Cleaning, 1971 Oil Spills Conf. Proc. 357.

[504] Gumtz & Meloy, Froth Flotation Cleanup of Oil-Contaminated Beaches, in id. at 523; Mikolaj & Curran, A Hot Water Fluidization Process for Cleaning Oil-Contaminated Beach Sand, in id. at 533; and Sartor & Foget, Evaluation of Selected Earthmoving Equipment for the Restoration of Oil-Contaminated Beaches, in id. at 505.

[505] The normal survival rate has been considered to be 3%, but the techniques developed by the Richmond (Cal.) Bird Care Center after the January 18, 1971 collision of two Standard Oil (Cal.) tankers in San Francisco Bay indicate that rates better than the 30% recoveries they experienced is possible. Barnes, Community Response to Man-Made Disaster, Wash. Post, Apr. 18, 1971, at H7, cols. 4-5. Accounts of this spill may be found in McQuenn, Tanker Collision, 2 Earth, May 1971, at 25; Boydston, How SoCal Cleaned Up Golden Gate Oil Spill, Oil & Gas J., May 24, 1971, at 70.

APPENDICES

APPENDIX A

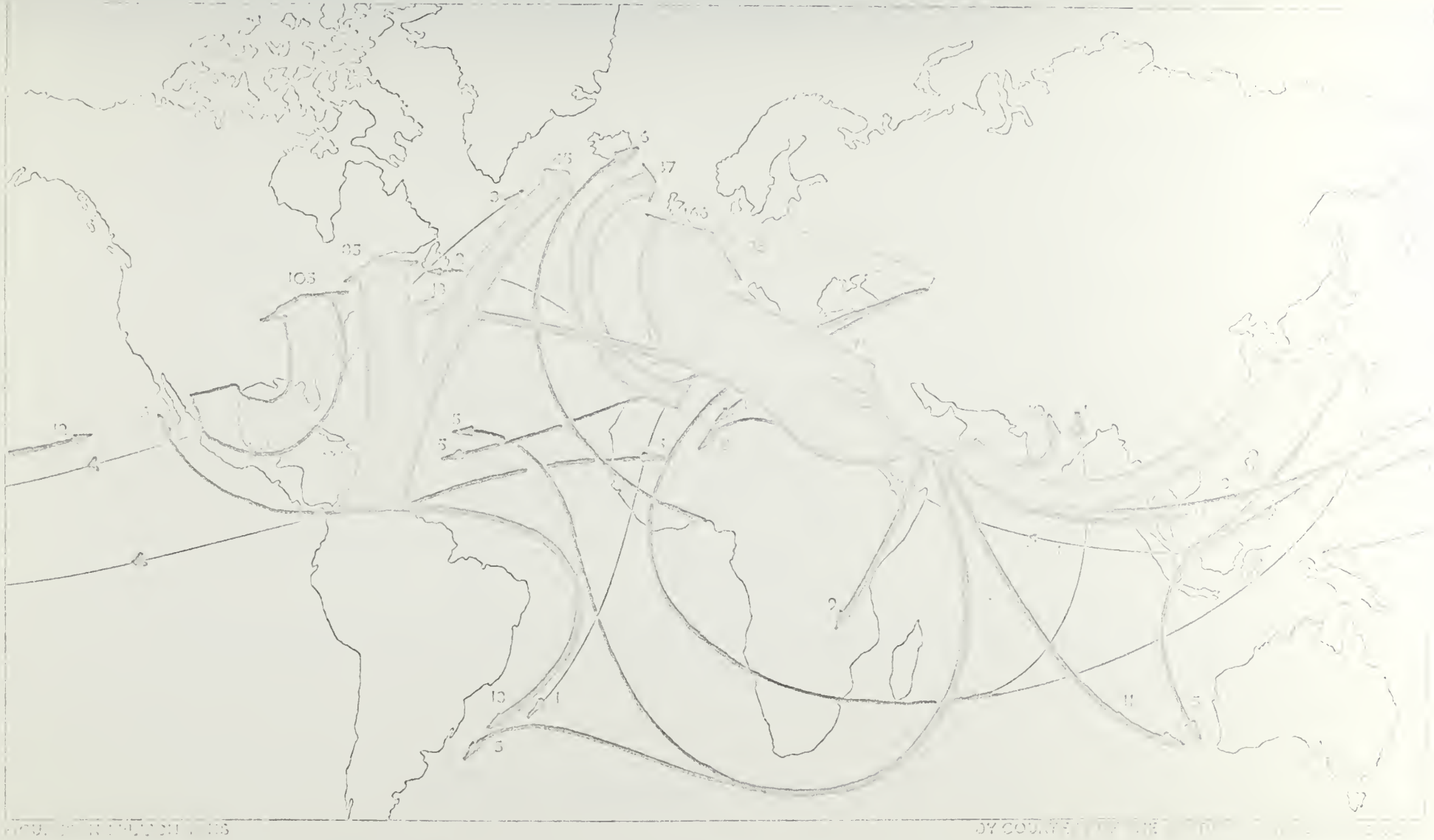
Appendix 6

MAPS

1. Main Oil Movements by Sea 1965
2. Main Oil Movements by Sea 1967
3. Main Oil Movements by Sea 1970
4. Main Oil Movements by Sea 1970
5. Main Oil Movements by Sea 1980
6. Oil Industry in the Middle East and North Africa
7. Oil Industry in Western Europe
8. World's Oil Exporting and Importing Countries
9. Dependence on Oil in the Developing World

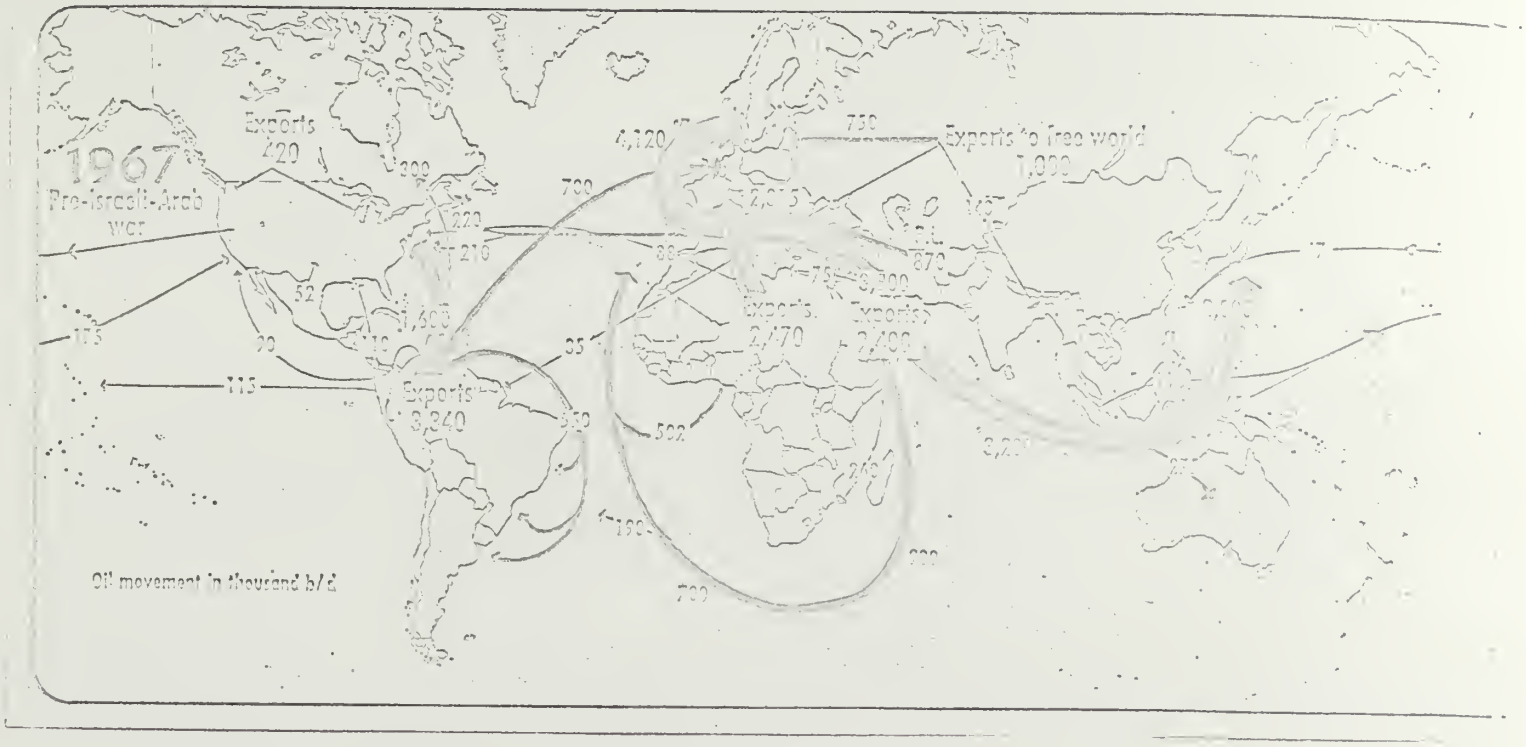
See text at notes 50 & 55 *supra*.

1. MAIN OIL MOVEMENTS BY SEA 1963



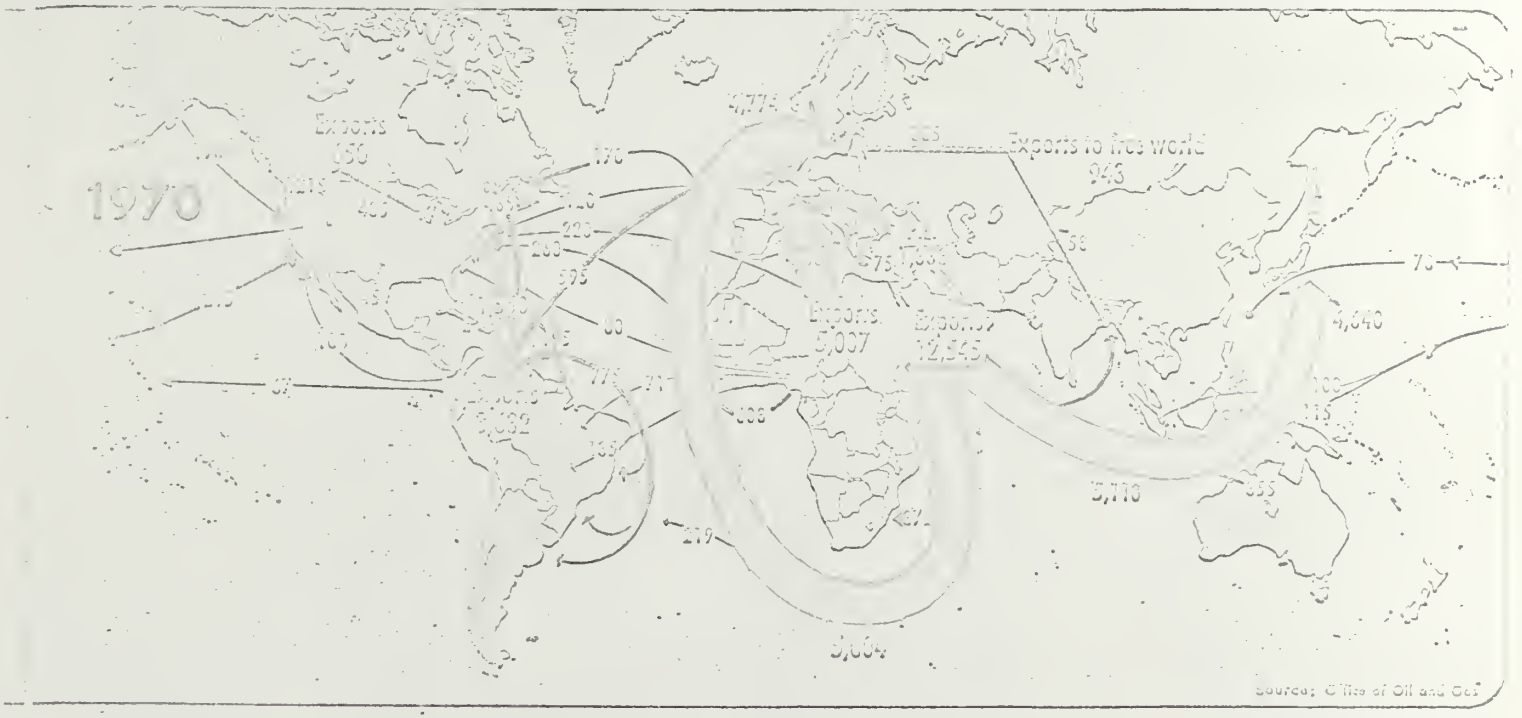
Source: IMCO, Pollution of the Sea by Oil: Results of an Inquiry Made in 1963 at 105 (1964), in Hearings on S. 1591 & S. 1604, S. 1870 & S. 1971 Before the Subcomm. on Air & Water Pollution of the Sen. Public Works Comm., 90th Cong., 1st Sess., pt. 1. at 120-21 (1967).

2. MAIN OIL MOVEMENTS BY SEA 1967



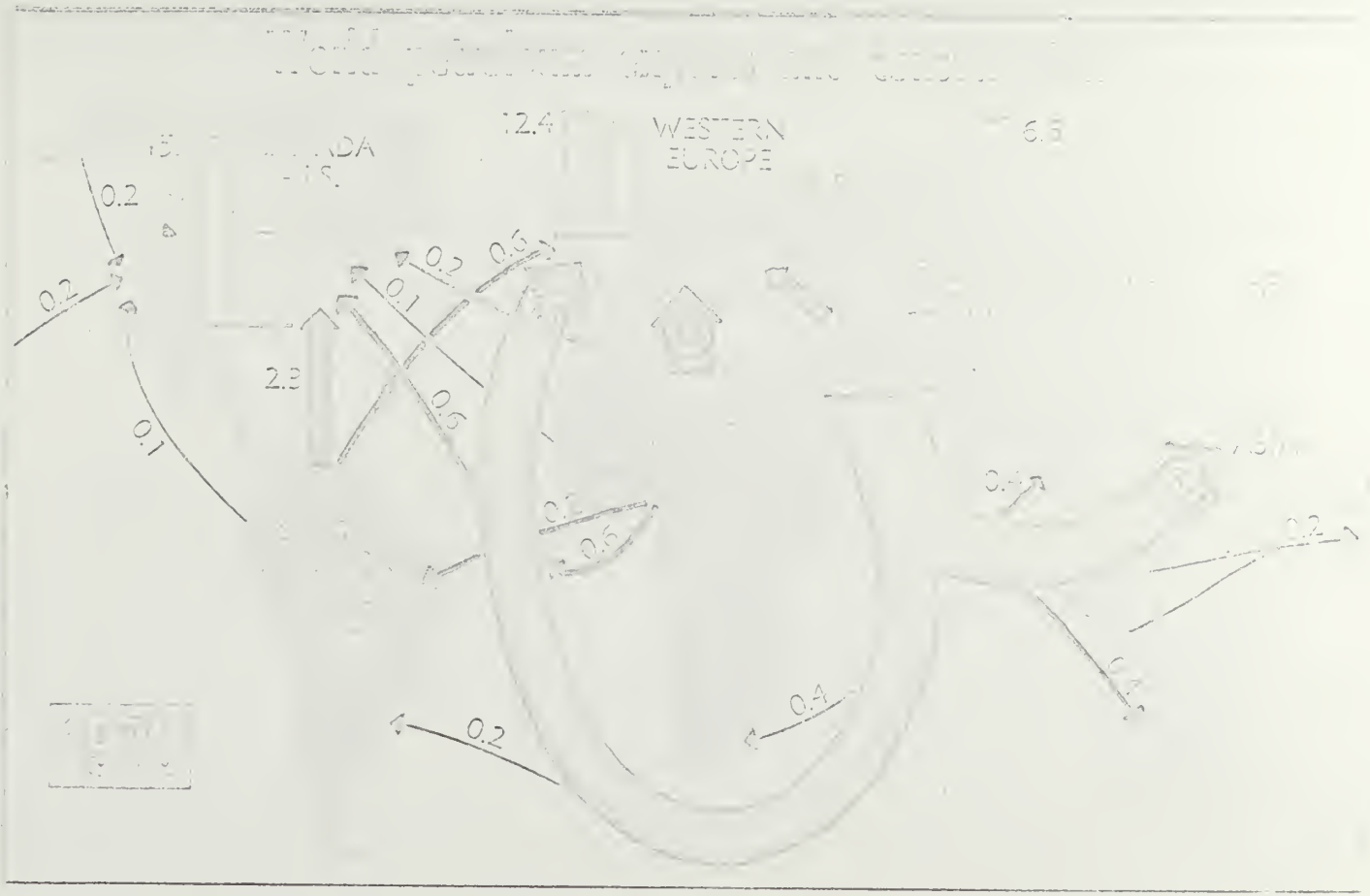
SOURCE: Oil & Gas J., Aug. 3, 1970, at 48.

3. MAIN OIL MOVEMENTS BY SEA 1970



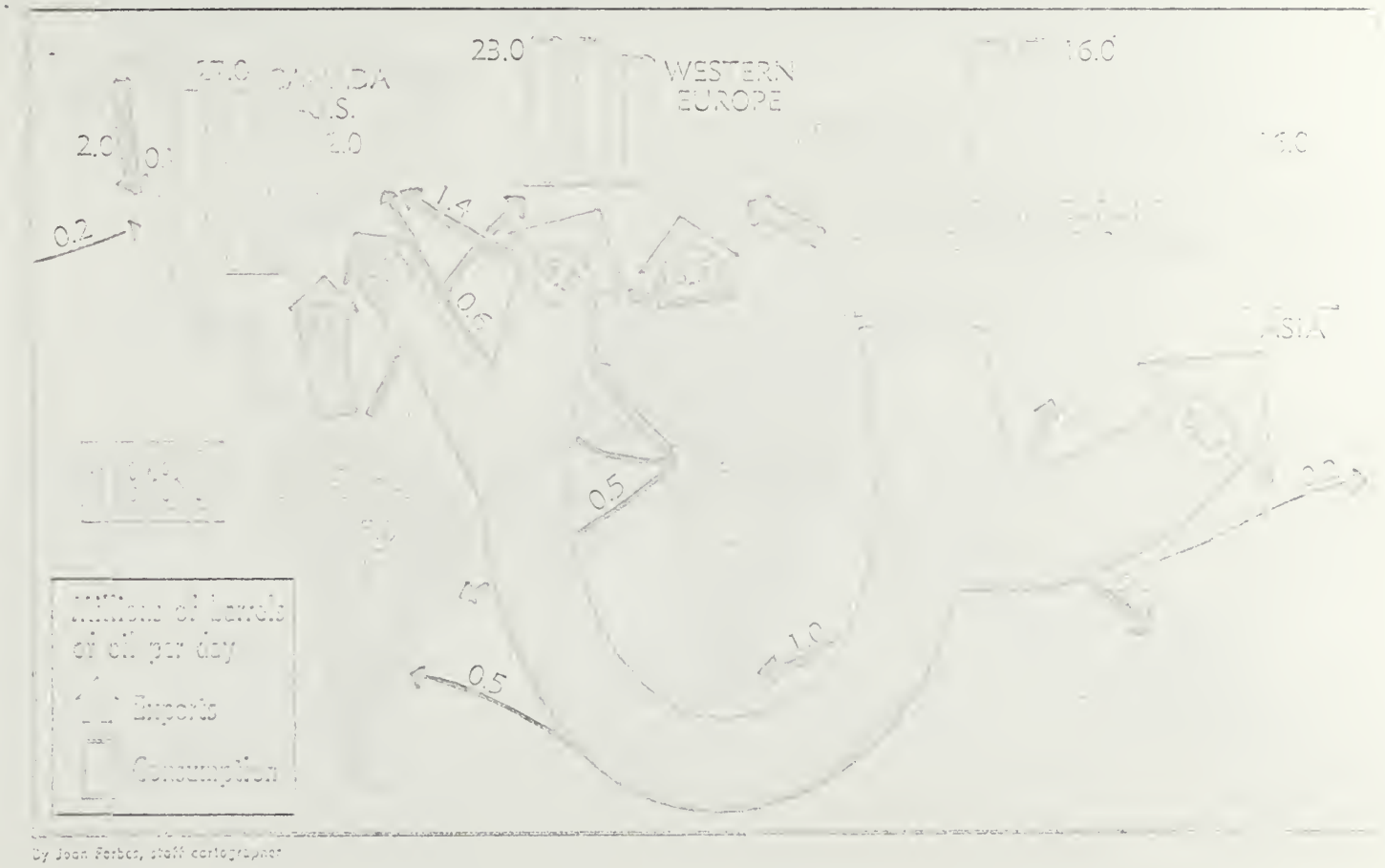
SOURCE: Oil & Gas J., Aug. 3, 1970, at 49.

4. MAIN OIL MOVEMENTS BY SEA 1970



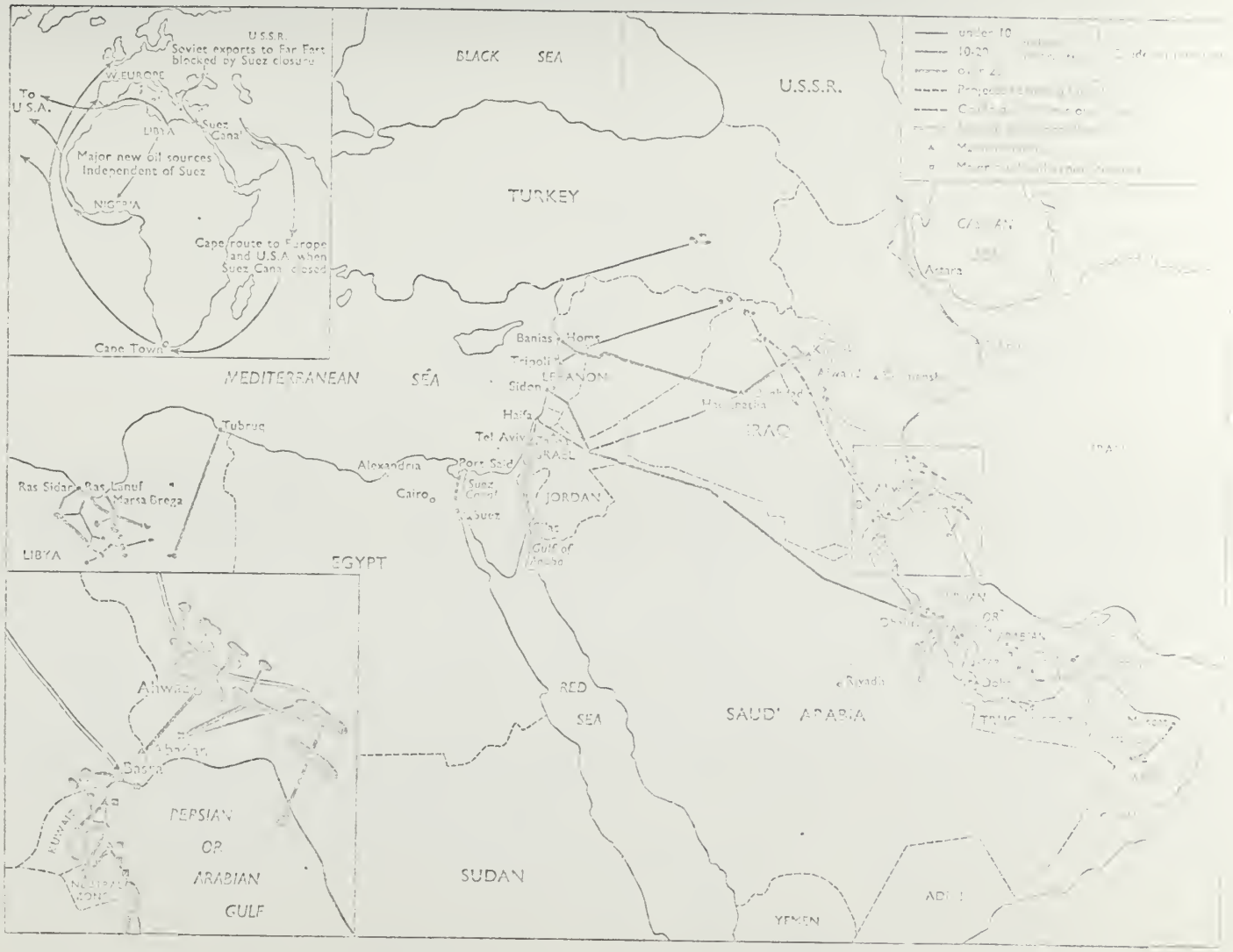
SOURCE: Christian Science Monitor, June 5, 1971, at 6. col. 1.

5. MAIN OIL MOVEMENTS BY SEA 1980



SOURCE: Christian Sceince Monitor, June 5, 1971, at 6, col. 1.

6. OIL INDUSTRY IN THE MIDDLE EAST AND NORTH AFRICA



SOURCE: P. Odell, Oil and World Power; A Geographical Interpretation 78-79 (1970).

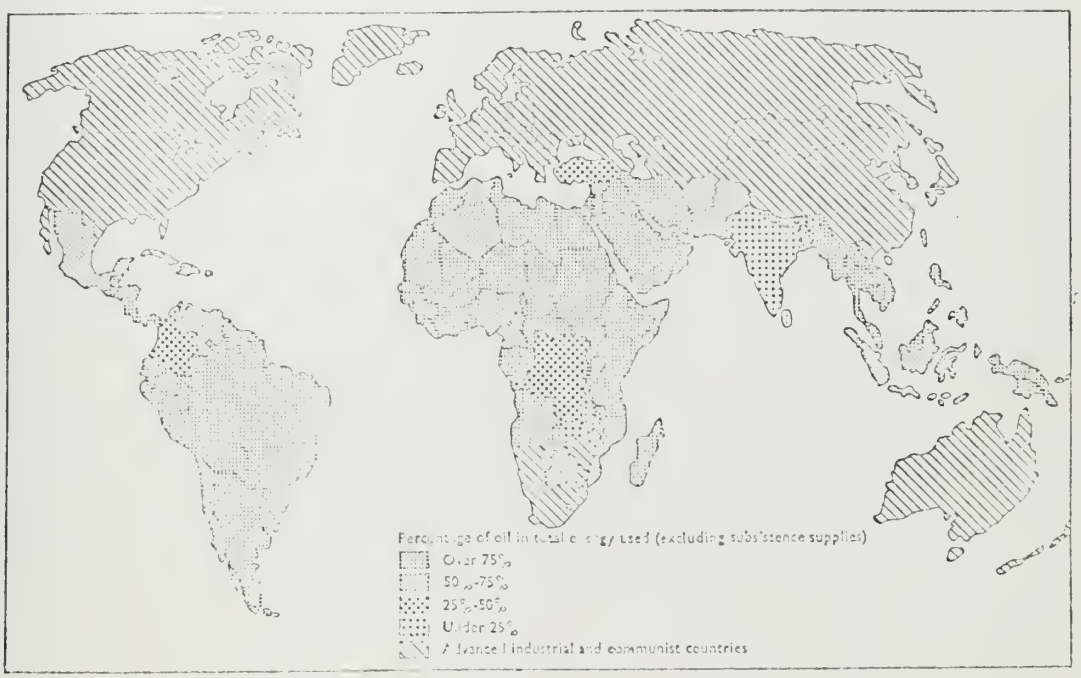
7. OIL INDUSTRY IN WESTERN EUROPE

SOURCE: P. Odell, Oil and World Power: A Geographical Interpretation 106-07 (1970)

8. WORLD OIL EXPORTING AND IMPORTING COUNTRIES

SOURCE: P. Odell, Oil and World Power:A Geographical Interpretation 66 (1970).

9. DEPENDENCE ON OIL IN THE DEVELOPING WORLD



SOURCE: P. Odell, Oil and World Power: A Geographical Interpretation 131 (1970).

APPENDIX B

1. Application for Certificate of Financial Responsibility (Oil Pollution) Form FMC-224

2. Certificate of Insurance Form FMC-225 (5/71)

3. Oil Discharge Surety Bond Form FMC-226 (9/70)

4. Guaranty in Respect of Liability for Discharge of Oil Form FMC-227 (9/70)

5. Certificate of Financial Responsibility (Oil Pollution) Form FMC-244 (10-70)

See note 185 supra.

FORM FMC-[illegible]

APPLICATION FOR CERTIFICATE OF FINANCIAL RESPONSIBILITY (OIL POLLUTION)

GENERAL

(READ PAGE 4 BEFORE COMPLETING)

INSTRUCTIONS: Answer all questions clearly and completely. Submit application to the Secretary, Federal Maritime Commission, Washington, D. C. 20573. The application is in four parts: Part I-General; Part II-Evidence of Financial Responsibility; Part III-Declaration; and Part IV-Concurrence of Agent. Applicants must answer all applicable questions. If a question does not apply, answer "not applicable" or "none," as appropriate. Incomplete applications will be returned. If additional space is required, supplemental sheets may be attached.

THIS SPACE FOR USE BY FMC ONLY

1. (a) LEGAL NAME OF APPLICANT:

(b) ENGLISH EQUIVALENT OF LEGAL NAME IF CORRECTLY WRITTEN IN LANGUAGE OTHER THAN ENGLISH:

(c) TRADE NAME OR NAMES USED:

2. DOES APPLICANT NOW HOLD, OR HAS APPLICANT EVER HELD, A CERTIFICATE OF FINANCIAL RESPONSIBILITY (OIL POLLUTION) ISSUED BY THE FEDERAL MARITIME COMMISSION?

☐ YES ☐ NO

(If "YES" complete items "a" and "b" below).

(a) CERTIFICATE NUMBER(S):	(b) NAME(S) UNDER WHICH ISSUED:

3. (a) STATE APPLICANT'S LEGAL FORM OF ORGANIZATION, I.E., WHETHER OPERATING AS AN INDIVIDUAL, CORPORATION, PARTNERSHIP, ASSOCIATION, JOINT STOCK COMPANY, BUSINESS TRUST OR OTHER ORGANIZED GROUP OF PERSONS (WHETHER INCORPORATED OR NOT), OR AS A RECEIVER, TRUSTEE OR OTHER LIQUIDATING AGENT, AND DESCRIBE CURRENT BUSINESS ACTIVITIES AND LENGTH OF TIME ENGAGED THEREIN:

(b) IF A CORPORATION, ASSOCIATION, JOINT STOCK COMPANY, BUSINESS TRUST, OR OTHER ORGANIZATION, GIVE:

NAME OF STATE OR FOREIGN COUNTRY IN WHICH INCORPORATED:	DATE OF INCORPORATION OR ORGANIZATION:

(c) IF A PARTNERSHIP, GIVE NAME AND ADDRESS OF EACH PARTNER:

(d) APPLICANT'S FISCAL YEAR:

(MONTH) (DAY) TO (MONTH) (DAY)

4. NAME AND ADDRESS OF APPLICANT'S UNITED STATES AGENT OR OTHER PERSON AUTHORIZED BY APPLICANT TO ACCEPT LEGAL SERVICE IN THE UNITED STATES *(See PART IV)*:

5. (a) [illegible] STATES, THE [illegible] OR A [illegible] OR (2) NOT OWNED BUT [illegible] OF GROSS TONNAGE [illegible] (See definitions of "Person" [illegible] AS MUCH OF THE [illegible] THE LETTER "P" AFTER [illegible]

NAME OF VESSEL	TYPE OF VESSEL	COUNTRY OF REGISTRY	REGISTRATION NUMBER	GROSS TONS	"1", 2" "1-P" OR "2-P"

5.(b) IF APPLICANT INDICATED "2" OR "2-P" FOR ANY VESSEL LISTED ABOVE, GIVE:

NAME OF VESSEL	OWNER	OWNER'S ADDRESS

(PAGE 2 OF [illegible])

6. AMOUNT OF LIABILITY [illegible] REQUIRED TO QUALIFY FOR CERTIFICATE(S) EVIDENCING FINANCIAL RESPONSIBILITY TO MEET LIABILITY FOR OIL POLLUTION. MULTIPLY GROSS TONNAGE OF LARGEST VESSEL IN APPLICANT'S FLEET BY 1,200 (SEE SECTION 2(a)(1) OF THE ACT). *(Maximum $14 million.)*

$ _____

7. ITEMS 8 THROUGH 11 ARE FOR OFFICIAL METHOD OF DEMONSTRATING FINANCIAL RESPONSIBILITY. CHECK THE APPROPRIATE BOX(S) BELOW AND ANSWER ONLY THE ITEM(S) CHECKED. [illegible] APPLICABLE TO THIS APPLICATION.

☐ INSURANCE *(Answer Item 8)*	☐ SURETY BOND *(Answer Item 9)*	☐ GUARANTY *(Answer Item 10)*	☐ SELF-INSURER *(See Item 11)*

8.(a) TOTAL AMOUNT OF APPLICANT'S INSURANCE AVAILABLE TO QUALIFY FOR A CERTIFICATE OF FINANCIAL RESPONSIBILITY (OIL POLLUTION). *(Evidence of the insurance must be filed with Federal Maritime Commission before a certificate will be issued. See 46 CFR 542.5):* $ _____

(b) NAME AND ADDRESS OF APPLICANT'S INSURER(S).

9.(a) TOTAL AMOUNT OF SURETY BOND. *(Surety Bond Form FMC-226 must be filed with The Federal Maritime Commission before a Certificate will be issued. See 46 CFR 542.5):*

$ _____

(b) NAME AND ADDRESS OF APPLICANT'S SURETY:

10.(a) TOTAL AMOUNT OF GUARANTY. *(Guaranty Form FMC-227 and required data must be filed with Federal Maritime Commission before a Certificate will be issued. See 46 CFR 542.5):*

$ _____

(b) NAME AND ADDRESS OF APPLICANT'S GUARANTOR:

11. IF APPLICANT INTENDS TO QUALIFY AS A SELF-INSURER FOR A CERTIFICATE UNDER 46 CFR PART 542.5(a)(2), ATTACH ALL DATA, STATEMENTS AND DOCUMENTATION REQUIRED THEREIN.

DECLARATION (PART III OF 4 PARTS)

THIS FORM IS SUBMITTED BY

F APPLICANT:

NAME AND TITLE OF OFFICIAL SIGNING THIS APPLICATION.

S OF HOME OFFICE (*Street, number, City, State or Country Code*):

ADDRESS OF PRINCIPLE OFFICE IN UNITED STATES (*If any*):

AREA CODE AND TELEPHONE NO.:

e that I have examined this application, including accompanying schedules and statements, and to the best of my knowl- belief, it is true, correct, and complete. Furthermore, it is agreed that the herein named applicant shall be responsible to the tates for any liability incurred under Section 11(f) of the Water Quality Improvement Act of 1970 with respect to all vessels owned or operated by said applicant. I also agree that in the event the designated agent, or his replacement as ppointed later, cannot be served due to his death, disability or unavailability, the Secretary, Federal Maritime Commis- ll be deemed to be the agent for service of process. Evidence of my authority to sign this application, if required, is .

SIGNATURE OF OFFICIAL

TS:

(See attached Sheet for Part IV)

tements hereinabove set forth are made subject to penalties prescribed by law, including criminal prosecution, for knowingly and will- y false statements on any matter within the jurisdiction of any agency of the United States (18 U.S.C. 1001).

C-224

Form [illegible]

[illegible] PART IV OF [illegible]

This part of the application must be completed by the applicant and by the person designated to serve as applicant's United States legal agent for service of process. After Part IV is completed, it should be submitted to the Commission by the applicant or by the agent, either separately or together with Parts I, II, and III.

It is hereby agreed that _____
(Typed name of United States agent)

shall serve as the hereinafter named applicant's United States legal agent for service of process pursuant to the provisions of Section 542.4, Title 46, C.F.R. This designation and agreement shall cease immediately in the event that said applicant designates a new agent acceptable and agreed to by the Federal Maritime Commission.

Date: _____

Signature of person signing on behalf of agent: _____

_____
(Title)

_____
(Business address)

_____

Name of applicant: _____

Signature of person signing on behalf of applicant: _____ Date _____

Title: _____

GPO 898-425

Form Approved
(5/71)

CERTIFICATE OF [illegible]
AS REQUIRED BY [illegible]
SECTION 311(p)(1) OF THE FEDERAL WATER POLLUTION CONTROL
ACT, AS AMENDED BY THE WATER QUALITY IMPROVEMENT ACT
OF 1970 (PUBLIC LAW 91-224)

_____ (hereinafter called "The Insurer") hereby certifies that in accordance with the provisions of section 11(p)(1) of the Federal Water Pollution Control Act, as amended, each of the owners and operators specified in the schedules below is insured by it in respect to the vessels specified therein, against liability to the United States Government in the amount of $100 per gross ton, or $14 million, whichever is the lesser, to meet the liability to the United States to which such vessels could be subjected under the aforesaid Act.

(Name of Insurer)

The Insurer consents to be sued directly by the United States Government in respect of any claim against any of said owners and operators, arising under section 11(f) of Public Law 91-224; provided, however, that in any such direct action (a) its liability shall not exceed $100 per gross ton of the tonnage of the vessel in respect of which the claim is made, or $14,000,000, whichever is the lesser, and (b) it shall be entitled to invoke all rights and defenses, as set forth in section 11(f)(1) of Public Law 91-224, which would have been available to any one of said owners or operators if the action had been brought against such owner or operator by the United States Government, and shall also be entitled to invoke all rights and defenses which would have been available to the Insurer if the action had been brought against said Insurer by any one of said owners or operators.

_____ (hereinafter referred to as _____

_____), is hereby designated as the legal agent of the Insurer for service of process in any such civil action.

This Insurance Certificate shall be applicable only in relation to events giving rise to a claim by the United States Government against any of the said owners or operators, under section 311(f) of Public Law 91-224, in respect of any of the below listed vessels, occurring on or after the effective date of this Certificate, which, as to each of such vessels, shall be the date such vessel is named in or added to the schedules below, and before the expiration date of this Insurance Certificate, which, as to each of such vessels, shall be the earlier of the following:

(a) The date whereon Federal Maritime Commission (FMC) withdraws the Certificate of Financial Responsibility (Oil Pollution) in respect of any such vessels;

(b) A date 30 days after the date of receipt by FMC of notice in writing that the Insurer has elected to terminate the insurance evidenced by this Certificate in respect of any such vessel, and has so notified said vessel's owner or operator;

(c) The date substitute evidence of financial responsibility has been accepted by FMC.

If, during the currency of this Insurance Certificate, any of the below-named owners or operators should request that a vessel or vessels owned or operated by them, and not specified herein, be made subject to this Certificate, and if the Insurer should accede to such request, and should so notify FMC, in writing, then, such vessel or vessels shall be deemed included in the said schedule of vessels, and shall thereupon be subject to this Insurance Certificate.

Certificate of Insurance No. _____

Date: _____

_____
(Name of Insurer)

_____
(Mailing Address)

_____

_____

By: _____
(Signature of official signing on behalf of Insurer)

_____
(Typed name and title of signer)

Certificate of Insurance No. _____

Schedule of Vessels, Barges and Equipment

Vessel	Gross Tonnage	Owner	Operator

Certificate of Insurance No. _____

Vessel	Gross Tonnage	Owner	Operator	Date Added

Certificate of Insurance No. _____

KNOW ALL MEN BY THESE PRESENTS, that we _____
(Name of Applicant)
_____ of _____,
(City) (State
_____, as Principal (hereinafter called Princi-
and County)
pal), and _____, a company
(Name of Surety)
created and existing under the laws of _____
(State and
_____, and authorized to do business in the United
County)
States as Surety (hereinafter called Surety) are held and firmly bound unto
the UNITED STATES OF AMERICA in the penal sum of _____,
for which payment, well and truly to be made, we bind ourselves and our heirs,
executors, administrators, successors, and assigns, jointly and severally,
firmly by these presents.

WHEREAS, the Principal intends to become a holder of a Certificate pursuant to the provisions of Part 542 of Title 46, Code of Federal Regulations and has elected to file with the Federal Maritime Commission such a bond as will insure financial responsibility to meet any liability it may incur under section 11, Water Quality Improvement Act of 1970 (84 Stat. 97) to the United States for the removal of any discharge of oil into or upon the navigable waters of the United States, adjoining shorelines, or into or upon the waters of the contiguous zone, and

WHEREAS, this bond is written to assure compliance by the Principal as an authorized holder of a Certificate pursuant to Part 542 of Title 46, Code of Federal Regulations, and shall inure to the benefit of the United States of America for the removal of any discharge of oil as provided in section 11, Water Quality Improvement Act of 1970,

NOW, THEREFORE, the condition of this obligation is such that if the Principal shall pay or cause to be paid to the United States of America any sum or sums for which the Principal may be held legally liable by reason of the discharge of oil into or upon the navigable waters of the United States, adjoining shorelines, or into or upon the waters of the contiguous zone, while this bond is in effect pursuant to and in accordance with the provisions of Part 542 of Title 46, Code of Federal Regulations, then this obligation shall be void, otherwise, to remain in full force and effect.

The liability of the Surety shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the penalty of the bond, but in no event shall the Surety's obligation hereunder exceed the amount of said penalty. The Surety agrees to furnish written notice to the Federal Maritime Commission forthwith of all demands, notices or payments made by said Surety under this bond.

Any claim against the Surety hereunder for the removal of oil discharged which the Principal may be liable for under the provision of section 311(f) of the Federal Water Pollution Control Act of 1972, may be brought directly against the Surety hereunder, however, that in the event of such direct claim the Surety shall be entitled to invoke all rights and defenses as set forth in section 311(f)(5) of the Act which would have been available to the Principal if the action had been brought against said Principal by the United States and which would have been available to the Surety if the action had been brought against the Surety by the Principal.

This bond is effective the _____ day of _____, 19___, 12:01 a.m., standard time at the address of the Principal as stated herein and shall continue in force until terminated as hereinafter provided. The Principal or the Surety may at any time terminate this bond by written notice sent by certified mail to the other party and the Federal Maritime Commission at its office in Washington, D. C., such termination to become effective thirty (30) days after actual receipt of said notice by the Commission. The Surety shall not be liable hereunder for any discharge of oil caused by the Principal after the termination of this bond as herein provided, but such termination shall not affect the liability of the Surety hereunder for any oil discharge caused by the Principal prior to the date such termination becomes effective.

The Surety designates _____
_____, with offices at _____
_____, as the Surety's legal agent for service of process for the purposes of the rules of the Federal Maritime Commission, Part 542 of Title 46, Code of Federal Regulations, issued under section 311(j)(1) of the Water Quality Improvement Act of 1970, entitled Control of Pollution by Oil.

In witness thereof, the said Principal and Surety have executed this instrument on this _____ day of _____, 19___.

(Insert the name and address of the Applicant in the case of a partnership, each partner)

PRINCIPAL

(Individual Principal or Partner) (Business Address)

(Individual Principal or Partner)

(Individual Principal or Partner)

Corporate Principal

Business Address

By (Affix Corporate Seal)

Title

SURETY

Corporate Surety

Business Address

By (Affix Corporate Seal)

Title

Only corporations or associations of individuals may qualify to act as Surety, and they only available to the satisfaction of the Federal Maritime Commission legal authority to assume the obligation of surety and financial ability to discharge it.

1. [illegible]

(Hereinafter referred to as the "Applicant") [illegible] the Vessel(s) [illegible] (the "Vessels"), which are using or [illegible] navigable waters [illegible] United States or the [illegible] desires to establish its financial responsibility [illegible] section 311(p)(1) of the Water Quality Improvement Act of 1970 (Public Law 91-224) (hereinafter referred to as "the Act"), [illegible] to discharge the Applicant's [illegible] liability [illegible] to be imposed by a claim of the United States Government [illegible] discharge of oil into or upon the navigable waters of the United States, adjoining shorelines, or into or upon the waters of the contiguous zone, as the case may be, that such legal liability has not been discharged by the Applicant within 21 days after the United States has obtained a final judgment (after appeal, if any) against the Applicant from a United States court of competent jurisdiction, or has become subject to the payment of a specified sum by virtue of a compromise settlement agreement entered into with the Applicant, with the approval of the Government, upon payment of the agreed sum, the Applicant is to be fully, irrevocably and unconditionally discharged from all further liability to the United States with respect to such claim.

2. The Guarantor's liability under this Guaranty shall in no event exceed the amount of the Applicant's liability under any such judgment or settlement agreement; provided, however, that if the aggregate amount of such judgments and settlements exceeds or would be computed in accordance with the formula contained in section 311(f)(1) of the Act, then the Guarantor's total liability under this Guaranty shall be limited to an amount computed in accordance with such formula. The Guarantor agrees to furnish written notice to the Federal Maritime Commission forthwith of all suits filed, judgments rendered, and payments made by said Guarantor under this Guaranty.

3. The Guarantor's liability under this Guaranty shall attach only in respect of events giving rise to causes of action against the Applicant by the United States in respect of any of the Vessels for removal of any oil discharges, within the meaning of section 311 of the Act, occurring on or after the effective date of this Guaranty with respect to any of such Vessels, shall be the date such Vessel is [illegible] added to the Schedules below, and before the expiration date of this Guaranty, which, as to any of such Vessels, shall be the earliest of the following dates:

(a) [illegible]

(b) [illegible]

(c) [illegible]

4. Any claim of the United States for removal costs for the removal of oil discharges which the Applicant is liable for under the provisions of section 311(f), Water Quality Improvement Act of 1970, may be brought directly against the Guarantor, provided, however, that in the event of such direct claim the Guarantor shall be entitled to invoke all rights and defenses, as set forth in section 311(f)(4) of the Act, which would have been available to the Applicant if the action had been brought against said Applicant by the United States, and which would have been available to the Guarantor if the action had been brought against him by the Applicant.

5. If, during the currency of this Guaranty, the Applicant requests that a Vessel owned or bareboat chartered by the Applicant, and not specified in the annexed Schedule, should become subject to this Guaranty, and if the Guarantor accedes to such request and so notifies the Commission in writing, then, such Vessel shall thereupon be deemed to be one of the Vessels included in the said Schedule and subject to this Guaranty.

6. The Guarantor hereby designates _____
_____ with offices at _____
_____, as the Guarantor's legal agent for service of process for the purposes of the Rules of the Federal Maritime Commission, Part 542 of Title 46, Code of Federal Regulations, issued under section 311(j)(1) of the Water Quality Improvement Act of 1970, entitled Control of Pollution by Oil.

_____
(Place of Execution and Effective Date of Guaranty)

(Type Name of Contractor)

(Type Address of Contractor)

By: _____
(Signature)

(Type Name and Title of Person Signing Above)

Washington, D.C. 20573

CERTIFICATE OF FINANCIAL RESPONSIBILITY (OIL POLLUTION)

No._____

KNOW ALL MEN BY THESE PRESENTS THAT

has evidenced financial responsibility to meet the liability to the United States of America which may result from the discharge of oil into or upon the navigable waters of the United States, adjoining shorelines, or into or upon the waters of the contiguous zone.

This Certificate, covering the vessel , is issued pursuant to the authority contained in section 11(p)(1) of Public Law 91-224 and is subject to the provisions of said Law, Part 542, Chapter V of Title 46 of the Code of Federal Regulations as it is or may be amended, the pertinent provisions of other applicable regulations promulgated under said Public Law, and the conditions set forth on the reverse of this certificate.

By Direction of the Federal Maritime Commission

Effective:

_____

Managing Director

1. Upon revocation of this Certificate it should be returned promptly to the Secretary, Federal Maritime Commission.

2. If, for any reason, including the sale or transfer to an operator of the vessel covered by this Certificate, the Certificant ceases to be responsible for liabilities to which such vessel could be subjected under section 11(f) of the Water Quality Improvement Act of 1970 (Act), the Certificant must complete the notice below and return this Certificate to the Secretary of the Federal Maritime Commission. However, in the event that the vessel covered by this Certificate is transferred by the Certificant to an operator under an arrangement whereby said Certificant continues to be responsible for liabilities under section 11 of the Act, and said Certificant continues to maintain on file with the Commission adequate evidence of financial responsibility to meet such liabilities, then this Certificate shall remain in full force and effect and should not be returned to the Commission.

Secretary
Federal Maritime Commission
Washington, D.C. 20573

Notice is hereby given that on _____ (Month, Day, Year), for the reason set forth below, the holder of this Certificate has ceased to be responsible for liabilities to which the vessel named on this Certificate could be subjected under section 11(f) of the Act. Said liability has ceased due to (check one) ☐ sale of the vessel, ☐ demise charter of the vessel without retention of oil pollution liability under section 11, ☐ other: _____

_____

_____

The location of the vessel on the date said liability ceased was: _____

_____

_____

and the name and mailing address of the person, if any, who has assumed said liability is _____

_____

_____

By: _____
(Signature) Date

_____
(Typed name of signer)

_____
(Title)

_____
(Company)

GPO 902-795

APPENDIX C

Ship Name	Flag	DWT	GRT	WQTA S 11(p)(1) CERTIFIED
]	Jap	477,000	[Begin construction Feb. 1972]	
Nisseki Maru	Jap	372,000	[Fitting out Sept. 1971][2]	
Universe Portugal	Lib	327,089		N
Universe Kuwait	Lib	326,848		N
Universe Iran	Lib	326,676		N
Universe Korea	Lib	326,676		N
Universe Ireland	Lib	326,585		N
Universe Japan	Lib	326,562		N
Berge King	Nor	280,420		N
World Hero	Lib	270,000	100,175	Y
Paul L. Fahrney	Lib	261,000		N
Texaco Denmark	Br	253,300	125,424	Y
Esso Ulidia	Br	253,000	126,550	Y
Esso Scotia	Br	253,000	127,158	Y
Jalinga	Nor	253,000	128,431	Y
Port Hawkesbury	Br	252,970	133,699	Y
Okinoshima Maru	Jap	250,749		N
Esso Hibernia	Br	250,262		N
Esso Northumbria	Br	250,262	126,543	Y
Esso Skandia	Lib	250,000	112,763	Y
Jade	Fr	250,000		N
Michael E. Lemos	Gr	250,000		
Texaco Copenhagen	Br	250,000		N

Ship Name	Flag	DWT	GRT	Work 3.11(c)(2) Certified
T. G. [illegible]	Br	250,000	136,301	Y
Esso Carlotta	Br	249,892	127,158	Y
Esso Europa	Ger	249,900		N
Esso Wilhelmshaven	Ger	249,860	113,759	Y
Esso Nederland	Ne	249,826	127,176	Y
Esso Europoort	Ne	249,826	127,176	Y
Esso Copenhagen	Lib	249,300	112,763	Y
Andros Orion	Gr	243,604	105,855	Y
Blois	Fr	240,000	118,415	Y
Zuiko Maru	Jap	233,300		N
Norse King	Nor	233,000	113,618	Y (pending)
Boxford	Br	228,618	113,081	Y
Thorshammer	Nor	228,250	113,656	Y
Alva Star	Br	228,100		N
World Princess	Lib	228,000		N
King Alexander The Great	Gr	227,506	103,072	Y
Veni	Nor	227,425	113,532	Y (pending)
Brita Onstad	Sw	227,145	113,426	Y
Thorshavet	Nor	227,000	112,885	Y
Caterina M	It	227,000	115,877	Y
Anita Monti	It	225,000		
Titan	Br	225,000		N
Towada Maru	Jap	223,700		N
Takase Maru	Jap	223,366		N
Fuko Maru	Jap	222,921	111,939	Y
Emeraude	Fr	220,100		N
Nerva	Nor	219,330		N

Olympic [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
World Chief	[illegible]	[illegible]		N
Olympic Action	[illegible]	[illegible]	98,586	Y
Humboldt	Ger	219,087	109,633	Y
Kong Haakon VII	Nor	219,000	109,423	Y
Aurelian	Nor	219,000	109,440	Y (pending
Bideford	Br	217,206	107,924	Y
Aquarius	Lib	216,821	99,822	Y
E. Hornsby Wasson	Br	216,643		N
James E. O'Brien	Br	216,641		N
Fernhaven	Nor	216,549	108,758	Y
Olympic Armour	Gr	216,508	109,580	Y
Olympic Athlete	Lib	216,490	97,468	Y
Olympic Alliance	Lib	216,441	97,206	Y
Olymbic Ambition	Lib	216,430	97,206	Y
Golar Patricia	Lib	216,323	98,842	Y
Golar Nichu	Lib	216,300	100,000	Y
Olympic Adventure	Lib	216,287	97,466	Y
Elizabeth Knudsen	Nor	216,187	107,426	Y
Olympic Accord	Lib	215,895	98,726	Y
British Explorer	Br	215,603	108,530	Y
Olympic Archer	Li	215,046	96,679	Y
British Inventor	Br	215,000	108,530	Y
Golar Betty	Li	215,000	98,842	Y
Andro Texas	Gr	214,920	98,983	Y
Olympic Arrow	Li	214,770	96,625	Y
Ardlui		214,180		N

Ship Name	Flag	Dwt	Grt	Suitable for STS Operations
Ardmore		214,149		N
Ardshiel		214,089		N
Ardvar		214,029		N
Energy Generation		213,724		N
Energy Transport		213,724		N
Energy Evolution		213,373		N
Energy Resource		213,906		N
Melania	Br	212,750	104,560	Y
Andros Apollon	Gr	212,500	99,460	Y
Andros Patria	Gr	212,450	99,460	Y
H.J. Haynes		212,010		N
J.T. Higgins		212,010		N
John A. McCone		212,010		N
D.L. Bower		212,010		N
Eugenie S. Niarchos	Li	212,000	96,795	Y
Mobil Pegasus	Br	211,666	112,660	Y
Mobil Pinnacle	Br	211,579	112,660	Y
Andros Master	Gr	211,500	98,983	Y
Andros Star	Gr	211,425	99,849	Y
Bulford	Br	210,822	105,095	Y
Sea Sovereign	Sw	210,550	107,286	Y
Mitra	Br	210,000	98,876	Y
Marinula	Br	210,000	98,876	Y
Tabriz	No	209,625	106,970	Y
Dagmar Maersk	Da	209,400	104,681	Y
Myscella		209,400		N
Arabiyah	Ku	208,907	107,436	Y

Subject	Nat	Dwt	GRT	Wdth Suez Canal
Al Furdus	Br	208,190	107,400	Y
Murex		208,050		N
Mactra	Br	208,050	104,723	Y
Magdala	Br	208,045	105,295	Y
Myrtea		207,645		N
Mysia		207,537		N
Miralda	Fr	207,450	105,316	Y
Medora	Br	207,332	105,252	Y
Keiyo Maru	Jap	207,284		N
Al Badiah	Ku	207,000	107,433	Y
Marisa	Br	206,937	105,495	Y
Japan Canna	Jap	206,923	116,457	Y
Meta	Br	206,913	105,521	Y
Mytilus		206,791		N
Megara	Br	206,750	105,245	Y
Metual	Ne	206,719	104,379	Y
Macoma	Ne	206,679	104,303	Y
Yowa Maru	Jap	206,588		N
Mangelia	Br	206,525	105,138	Y
Melo	Br	206,492	105,138	Y
Idemitsu Maru	Jap	206,106		N
Texaco Hamburg	Br	206,100	104,616	Y
Kaien Maru	Jap	205,957	111,304	Y
Japan Marguerite	Jap	205,864	117,404	Y
Texaco Frankfurt	Br	205,780	104,616	Y
Texaco Europe	Br	205,780	104,616	Y
Texaco North America	Br	205,780	104,616	Y

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Dorthe Dan	Dr	205,000	103,146	Y
Japan Grandeur	Jap	204,000	112,503	Y
Birch Maersk	Dr	205,000	103,140	Y
Evgenia Chandris		205,600		N
Shoju Maru	Jap	203,806		N
Berge Commander		202,942		N
Elena		202,806		N
Bergehus		202,557		N
Meigen Maru	Jap	201,319	105,192	Y
Energy Production		200,000		N
Andros Titan	Gr	200,000	107,091	Y
Marticia	Br	200,000	104,561	Y

Flag:

[illegible]: [illegible]

Own: [illegible]

Den: [illegible]

Lib: [illegible]

Nor: [illegible]

Br: [illegible]

Fr: [illegible]

Ger: [illegible]

Ne: Netherlands

Gr: Greece

Sw: Sweden

It: Italy

Da: Denmark

Ku: Kuwait

Sources:

[1] Oil & Gas J., May [illegible], 1971, at 22.

[2] Ibid.

* Supplement 1, January to March 1971, to 1971 Tanker Register.

All other information from 1971 Tanker Register 15 and files of Office of Oil Pollution Responsibility, FMC (data as of June 1, 1971).

See note 190 supra.

APPENDIX D

APPENDIX II

LARGEST FLAG STATES ADHERENCES TO MARITIME CONVENTIONS

RGEST FLAG STATES PARTY TO THE TERRITORIAL SEA CONVENTION

ate	Party '54 Conv.	Sign '69 C.L. Conv.	Tankers Nos.	Ranking of first 15 in nos.	Ranking of first 15 in dwt	Total Merchants Nos.	Ranking of first 15 in nos.	Ranking of first 15 in dwt
	yes	yes	423	2d	2d	1785	3d	3d
pan	yes	no	359	4th	4th	1989	1st	2d
SR	yes	no	353	5th	8th	1717	4th	7th
A	yes	yes	305	6th	5th	1937	2d	5th
aly	yes	yes	182	7th	10th	611	9th	9th
therlands	yes	yes	92	12th	11th	445	12th	13th
nmark	yes	no	56	14th	13th	306	15th	14th
			1770			8790		

RGEST FLAG STATES NOT PARTY TO THE TERRITORIAL SEA CONVENTION

beria	yes	no	696	1st	1st	1707	5th	1st
way	yes	no	377	3d	3d	1205	6th	4th
ece	yes	no	179	8th	7th	1072	7th	6th
st Germany	yes	yes	50	15th	15th	923	8th	8th
ama	yes	yes	170	9th	6th	610	10th	10th
nce	yes	yes	142	10th	9th	471	11th	11th
den	yes	yes	76	13th	12th	393	13th	12th
in	yes	yes	102	11th	14th	389	14th	15th
			1792			6770		

LARGEST FLAG STATES NOT SIGNATORY TO 1969 CIVIL LIABILITY CONVENTION

State	Party '54 Conv.	Party T.S. Conv.	Tankers Nos.	Ranking of first 15 in nos.	Ranking of first 15 in dwt	Total Merchants Nos.	Ranking of first 15 in nos.	Ranking of first 15 in dwt
Liberia	yes	no	696	1st	1st	1707	5th	1st
Norway	yes	no	377	3d	3d	1205	6th	4th
Japan	yes	yes	359	4th	4th	1989	1st	2d
USSR	yes	yes	353	5th	8th	1717	4th	7th
Greece	yes	no	179	8th	7th	1072	7th	6th
Denmark	yes	yes	56	14th	13th	306	15th	14th
			2020			7996		

AGREEMENT AMONG THE FIFTEEN LARGEST FLAG NATIONS

	Tankers of 15 largest	Tankers World's total	Total Ships of 15 largest	Total Ships World's total
States party to territorial sea convention	49%	43%	43%	45%
States not party to territorial sea convention	51%	57%	57%	55%
States party to 1954 Oil Pollution Prevention Conv.	100%	87%	100%	80%
States not party to 1954 Oil Pollution Prevention Convention	0%	--	0%	--
States signatory to 1969 Civil Liability Covention	43%	50%	49%	59%
States not signatory to 1969 Civil Liability Convention	57%	50%	51%	41%

ates party to both rritorial sea and 54 Conventions	49%	50%	43%	50%
ates party to 1954 & rritorial Sea and gnatory to 1969 nventions	28%	51%	31%	26%
	[US, UK, Italy & Netherlands]	[4 Australia, Dom. Rep., Finland, Portugal & Switzerland]		

rce: Office of Subsidy Admin., Maritime Admin., Dep't Commerce, Merchant Fleets of the World: Oceangoing Steam and Motor Ships of 1,000 Gross Tons and Over as of December 31, 1969 (1970) and 1971 Treaties in Force.

See notes 285 & 305 supra.

APPENDIX E

Appendix E

STATES PARTY TO MARITIME

LAW CONVENTIONS

NORTH AMERICA	Mem. UN		T/S	Party	Party H/S	Party C/S	C/L Conv. Party/Sig.	Interv.Conv. Party/Sig.	Oil Poll.Prev. Conv.Parties 54+62	69	Conv.
Canada	yes	C/S	12 mi			yes			yes		
USA	yes	C/S	3 mi	yes	yes	yes	yes	yes	yes		
Mexico	yes	C/S	12 mi	yes	yes	yes			yes		
CENTRAL AMERICA											
Guatemala	yes	C/S	12 mi		yes	yes	yes	yes			
Br. Hondouras	no	C/S									
Hondouras	yes	C/S	12 mi								
El Salvador	yes	C/S	200 mi								
Nicaragua	yes	C/S	3 mi								
Costa Rica	yes	C/S	3 mi								
Panama	yes	C/S	200 mi				yes	yes	yes		
Cuba	yes	Isl	3 mi								
Haiti	yes	Isl	6 mi	yes	yes	yes					
Dominican Rep.	yes	Isl	6 mi	yes	yes	yes	yes	yes	yes		
Puerto Rico	---	Isl	3 mi	yes(USA)							
Barbados	yes	Isl	3 mi								
Trinidad & Tobago	yes	Isl	12 mi	yes	yes	yes					
Jamaica	yes	Isl	12 mi		yes	yes					
SOUTH AMERICA											
Colombia	yes	C/S	12 mi			yes					
Venezuela	yes	C/S	12 mi	yes	yes	yes			yes		
Guyana	yes	C/S	3 mi								
Surinam		C/S	3 mi	yes(Netherlands)							yes
Fr. Guiana		C/S									
Brazil	yes	C/S	200 mi				yes	yes			yes
Uruguay	yes	C/S	200 mi								
Argentina	yes	C/S	200 mi								yes
Chile	yes	C/S	200 mi								

SOUTH AMERICA(cont)	Mem. UN		T/S	Party	Party H/S	Party C/S	C/L Conv. Party/Sig.	Interv.Conv. Party/Sig.	Oil Poll.Prev. Conv.Parties 54-62	69
Bolivia	yes	L/L	---							
Peru	yes	C/S	200 mi							
Ecuador	yes	C/S	200 mi							
Paraguay	yes	C/S	---							
GREENLAND		Isl	3 mi	yes(Denmark)						
ICELAND	yes	Isl	4 mi				yes	yes	yes	

EUROPE	Mem. UN		T/S	Party T/S	Party H/S	Party C/S	C/L Conv. Party/Sig	Interv.Conv. Party/Sig.	Oil Poll.Prev. Conv.Parties 54+62	
Ireland	yes	Isl	4 mi				yes	yes	yes	
UK	yes	Isl	3 mi	yes	yes	yes	yes	yes yes	yes	
Norway	yes	C/S	4 mi						yes	
Sweden	yes	C/S	4 mi			yes	yes	yes	yes	
Finland	yes	C/S	4 mi	yes	yes	yes	yes	yes	yes	
Denmark	yes	C/S	3 mi	yes	yes	yes			yes	
Fed.Rep.Germany	no	C/S	3 mi				yes	yes	yes	
German D.R.	no	C/S	3 mi							
USSR	yes	C/S	12 mi	yes	yes	yes			yes	
Netherlands	yes	C/S	3 mi	yes	yes	yes	yes	yes	yes	
Belgium	yes	C/S	3 mi				yes	yes	yes	
Luxembourg	yes	L/L	---							
France	yes	C/S	3 mi			yes	yes	yes	yes	
Spain	yes	C/S	6 mi				yes	yes	yes	
Portugal	yes	C/S	6 mi	yes	yes	yes	yes	yes	yes	
Italy	yes	C/S	6 mi	yes	yes		yes	yes	yes	
Sardinia		Isl								
Corsica		Isl								
Sicily		Isl								
Switzerland	no	L/L	---	yes	yes	yes	yes	yes	yes	
Liechtenstein	no	L/L	---							
Austria	yes	L/L	---							
Czechoslovakia	yes	L/L	---	yes	yes	yes				
Hungary	yes	L/L	---	yes	yes					
Rumania	yes	C/S	12 mi	yes	yes	yes	yes	yes		
Bulgaria	yes	C/S	12 mi	yes	yes	yes				
Turkey	yes	C/S	6 mi							
Greece	yes	C/S	6 mi						yes	
Albania	yes	C/S	12 mi		yes	yes				
Yugoslavia	yes	C/S	10 mi	yes	yes	yes	yes	yes		
Malta	yes	Isl	3 mi	yes		yes				
San Marino	no	L/L	---							
Crete	no	Isl								
Cyrpus	yes	Isl								
Poland	yes	C/S	3 mi		yes	yes	yes	yes	yes	
Monaco		C/S	12 mi				yes	yes	yes	

AFRICA	Mem. UN		T/S	Party	Party H/S	Party C/S	C/L Conv. Party Sig	Interv.Conv. Party/Sig.	Oil Poll.Prev. Conv.Parties 54-62	
Morocco	yes	C/S	3 mi						yes	
Algeria	yes	C/S	12 mi						yes	
Tunisia	yes	C/S	6 mi							
Libya	yes	C/S	12 mi							
UAR	yes	C/S	12 mi						yes	
Sudan	yes	C/S	12 mi							
Ethiopia	yes	C/S	12 mi							
Afars & Issas	no	C/S								
Somali Rep.	yes	C/S	12 mi							
Kenya	yes	C/S	12 mi	yes	yes	yes				
Tanzania	yes	C/S	12 mi							
Mozambique	no	C/S								
Malagasy Rep.	yes	Isl	12 mi	yes	yes	yes	yes	yes	yes	
Swaziland	yes	L/L	---	yes	yes	yes				
South Africa	yes	C/S	6 mi	yes	yes	yes				
Lesotho	yes	L/L	---							
So West Africa	no	C/S								
Angola, Port.	no	C/S								
Angola	no	C/S								
Congo, Rep.	yes	C/S	15 mi							
Gabon	yes	C/S	25 mi							
Equatorial Guinea	yes	C/S	12 mi							
Cameroon	yes	C/S	18 mi				yes	yes		
Nigeria	yes	C/S	12 mi	yes	yes				yes	
Dahomey	yes	C/S	12 mi							
Togo	yes	C/S	12 mi							
Ghana	yes	C/S	12 mi				yes	yes	yes	
Ivory Coast	yes	C/S	6 mi				yes	yes	yes	
Liberia	yes	C/S	12 mi						yes	
Sierra Leone	yes	C/S	12 mi	yes	yes	yes				
Guinea	yes	C/S	130 mi							
Port. Guinea		C/S								

AFRICA (cont.)	Mem. UN		T/S	Party	Party H/S	Party C/S	C/L Conv. Party/Sig.	Interv.Conv. Party/Sig.	Oil Poll.Prev. Conv.Parties 54+62
Senegal	yes	C/S	12 mi	yes	yes	yes			
Gambia	yes	C/S	12 mi						
Mauritania	yes	C/S	12 mi						
Span. Sahara		C/S							
Mali	yes	L/L	---						
Niger	yes	L/L	---						
Chad	yes	L/L	---						
Upper Volta	yes	L/L	---		yes				
Central Afric.Rep.	yes	L/L	---		yes				
Dem.Rep.Congo	yes	C/S	3 mi						
Uganda	yes	L/L	---	yes	yes	yes			
Rwanda	yes	L/L	---						
Burundi	yes	L/L	---						
Zambia	yes	L/L	---						
Rhodesia	no	L/L	---						
Botswana	yes	L/L	---						
Mauritius	yes	Isl	12 mi	yes	yes	yes			
Malawi	yes	L/L	---	yes	yes	yes			

Middle East and ASIA (exclud.USSR)	Mem. UN		T/S	Party	Party H/S	Party C/S	C/L Conv. Party/Sig.	Interv.Conv. Party/Sig.	Oil Poll. Conv. 54-62	Oil Poll. Conv. Parties	Oil Poll. Conv.
Mongolia	yes	L/L	---								
China, Red	no	C/S	12 mi								
Japan	yes	Isl	3 mi	yes	yes			yes	yes		
Korea, N	no	C/S	12 mi								
Korea, S	no	C/S	3 mi					yes			
Taiwan	yes	Isl	3 mi			yes	yes	yes			
Philippines	yes	Isl							yes		
Vietnam, N	no	C/S	12 mi								
Vietnam, S	no	C/S	3 mi								
Laos	yes	L/L	---								
Thailand	yes	C/S	12 mi	yes	yes	yes					
Cambodia	yes	C/S	12 mi	yes	yes	yes					
Malaysia	yes	C/S	12 mi	yes	yes	yes					
Singapore	yes	C/S									
Indonesia	yes	Isl	12 mi		yes		yes				
Burma	yes	C/S	12 mi								
Pakistan	yes	C/S	12 mi								
Bhutan	no	L/L	---								
Nepal	yes	L/L	---		yes						
India	yes	C/S	12 mi								
Afghanistan	yes	L/L	---		yes						
Iran	yes	C/S	12 mi								
Ceylon	yes	Isl	12 mi								
Iraq	yes	C/S	12 mi								
Kuwait	yes	C/S	12 mi						yes		
Syria	yes	C/S	12 mi						yes		
Lebanon	yes	C/S	20 km						yes		
Israel	yes	C/S	6 mi	yes	yes	yes			yes		
Jordan	yes	C/S	3 mi						yes		
Saudi Arabia	yes	C/S	12 mi								
Trucal States	no	C/S									
Muscat & Oman	no	C/S	3 mi								

Middle East and ASIA (excl.USSR) (cont.)	Mem. UN		T/S	Party	Party H/S	Party C/S	C/L Conv. Party/Sig.	Interv.Conv. Party/Sig.	Oil Poll.Prev. Conv.Parties 54+62	69	IMCO Conv.
S. Yemen	yes	C/S	12 mi						yes		
Yemen	yes	C/S	12 mi								
Maldive Isl.	yes	Isl	12 mi								yes
AUSTRALIA	yes	Isl	3 mi	yes	yes	yes	yes	yes	yes		yes
Fiji	yes	Isl									
NEW ZEALAND	yes	Isl	3 mi			yes					yes

Sources: Senate Comm. on Foreign Relations & House Comm. on Foreign Affairs, 92d Cong., 1st Sess., Legislation on Foreign Relations with Explanatory Notes 604-05 (Jt. Comm. Print 1971); 1971 Treaties in Force 323-25; Man's Domain: A Thematic Atlas of the World (1969); International Law Division, Office of the Judge Advocate General of the Navy. See notes 11,55 & 305 supra.

For Amendment		Against Amendment	
In discussion	Vote (14)	In discussion	Vote (17)
ain	Spain	Poland	Poland
ance	France	Greece	Greece
	UAR	Netherlands	Netherlands
ly	Italy	Great Britain	Great Britain
tugal	Portugal	United States	United States
ory Coast	Ivory Coast	Liberia	Liberia
goslavia	Yugoslavia	USSR	USSR
tralia	Australia	Israel	Israel
	Cameroon		Belgium
	Canada		Denmark
	Rep. China		Finland
	Indonesia		Ghana
	Ireland		Japan
	Libya		Norway
	Malagasy Rep.		Sweden
	Peru		Switzerland
	Philippines		Ukrainian SSR
	Singapore		
	Syria		

Abstentions on vote (7)

Brazil
Fed. Rep. Germany
India
Korean Rep.
Romania
Thailand
Venezuela

No record of Panama's vote.

ce: IMCO Doc. LEG/CONF/C.2/SR.20 at 5-8 (Nov. 25, 1969).

See notes 393-400 and accompanying text for discussion of this table.

SUPPLEMENTARY CONVENTION TO EXTEND TO INTERNATIONAL ORGANIZATIONS THE BENEFITS OF THE CONVENTION ON THE PREVENTION AND PUNISHMENT OF THE CRIME OF GENOCIDE, OPEN AT PARIS, November 28, 1969

Original signatories, Nov. 28, 1969:

Belgium	Malagasy Republic
Cameroon	Monaco
Republic of China	Poland
Federal Republic of Germany	Portugal
France	Switzerland
Ghana	United Kingdom
Guatemala	Yugoslavia
Iceland	United States
Italy	Korea
Ivory Coast	

Subsequent signatories, with dates and references:

Brazil	Dec. 30, 1969, 62 Dep't State Bull.	475 (1970
Spain	Oct. 7, 1970, 63 id.	599 (1970)
Dominican Republic	Oct. 22, 1970, 63 id.	664 (1970)
Netherlands	Nov. 11, 1970, 63 id.	666 (1970)
Panama	Dec. 1, 1970, 64 id.	36 (1971)
Sweden	Dec. 7, 1970, 64 id.	36 (1971)
Australia	Dec. 17, 1970, 64 id.	131 (1971)
Ireland	Dec. 18, 1970, 64 id.	131 (1971)
Japan	Dec. 15, 1970, 64 id.	131 (1971)
Finland	Dec. 30, 1970, 64 id.	160 (1971)
Romania	Dec. 30, 1970, 64 id.	160 (1971)

See note 415 supra.

Original signatories, Dec. 29, 1959:

Belgium	Malagasy Republic
Cameroon	Monaco
Republic of China	Poland
Federal Republic of Germany	Portugal
France	Switzerland
Ghana	United Kingdom
Guatemala	Yugoslvaia
Iceland	United States
Italy	Indonesia
Ivory Coast	

Subsequent signatories, with dates and references:

Brazil	Dec. 30, 1969, 62 Dep't State Bull.	475 (1970)
Spain	Oct. 7, 1970, 63 id.	599 (1970)
Dominican Republic	Oct. 22, 1970, 63 id.	664 (1970)
Netherlands	Nov. 11, 1970, 63 id.	666 (1970)
Panama	Dec. 1, 1970, 64 id.	36 (1971)
Sweden	Dec. 7, 1970, 64 id.	36 (1971)
Australia	Dec. 12, 1970, 64 id.	131 (1971)
Ireland	Dec. 18, 1970, 64 id.	131 (1971)
Finland	Dec. 30, 1970, 64 id.	160 (1971)
Romania	Dec. 30, 1970, 64 id.	160 (1971)

See note 416 supra.

APPENDIX I

Baltic Sea

1. Off [illegible] Island
2. Off Hoglum (Gogland) Island
3. Off Rodskar Island
4. Off Kalbadagrund Lighthouse
5. Off Porkkala Lighthouse
6. Off Hankoniemi Peninsula
7. Off Kopu Peninsula
8. Off Gotland Island
9. Off Oland Island
10. Approaches to Rostock
11. In the Sound.

Western European Waters

1. Off the Oslo Fjord
2. Off Oksoy
3. Off Lindesnes
4. Off Lista
6. Off Feistein
7. In the German Bight
8. At North Hinder
9. North of Sandettie Bank
10. In the Strait of Dover
11. Off Lizard
12. Off Lands End
13. South of the Scilly Isles
14. West of the Scilly Isles
15. Off Smalls
16. Off Skerries
17. Off Chicken Rock
18. In the North Channel
19. Off Tuskar Rock
20. Off Fastnet Rock
21. Off Casquets
22. Off Ushant
23. Rochebonne Shelf
24. Off Finisterre
25. Off Cape Roca
26. Off Cape St. Vincent
27. At Banco del Hoyo
28. Off Hook of Holland.

C. Mediterranean and Blank Sea

1. In the Strait Gibralter
2. Off Cani Island
3. Off Cape Bon.

APPENDIX I (cont'd)

Indian Ocean and Adjacent Waters

1. In the Gulf of Suez
2. In the southern portion of the Red Sea
3. In the Bab el Mandeb Strait
4. In Hormuz Strait
5. In Persian Gulf.

Off South Africa

1. Cooper Point
2. South Sand Bluff
3. Bashee Point
4. Hood Point
5. Great Fish Point
6. Cape Recife
7. Seal Point
8. Cape Agulhas
9. Quoin Point
10. Slangkop Point
11. Alphard Banks.

Far East and South East Asia

1. Cape Terpenie (Sakhalin).

G. United States, Atlantic Coast

1. Off New York
2. Off Delaware Bay
3. In the approaches to Chesapeake Bay
4. Off Chedabucto Bay, Nova Scotia.

H. United States, Pacific Coast

1. Off San Francisco
2. In the Santa Barbara Channel

Source: Price, International Activity Regarding Shipboard Oil Pollution Control, 1971 Proceedings of Joint Conference on Prevention and Control of Oil Spills 37-38.

See note 467 supra.

APPENDIX A

Annex 3

DRAFT AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION OF THE SEA BY OIL, 1954, ADOPTED BY IMCO MARITIME SAFETY COMMITTEE

ARTICLE VI bis

(1) Every tanker to which the present Convention applies and for which the building contract is placed on or after the date of coming into force of this Article shall be constructed in accordance with the provisions of Annex [C]. In addition, every tanker to which the present Convention applies and for which the building contract is placed, or in the absence of a building contract the keel of which is laid or which is at a similar stage of construction, before the date of coming into force of this Article shall be required, within two years after that date, to comply with the provisions of Annex [C], where such a tanker falls into either of the following categories:

(a) a tanker, the delivery of which is after 1 January 1977; or

(b) a tanker to which both the following conditions apply: (i) delivery is not later than 1 January 1977; and (ii) the building contract is placed after 1 January 1972, or in cases where no building contract has previously been placed, the keel is laid or the tanker is at a similar stage of construction after 30 June 1972.

(2) A tanker required under paragraph (1) of this Article to be constructed in accordance with Annex [C] and so constructed shall carry on board a certificate issued or authorized by the responsible Contracting Government attesting such compliance. A tanker which under paragraph (1) of this Article is not required to be constructed in accordance with Annex [C] shall carry on board a certificate to that effect issued or authorized by the responsible Contracting Government, or if the tanker does comply with Annex [C] although not required to do so, it may carry on board a certificate issued or authorized by the responsible Contracting Government attesting such compliance. A Contracting Government shall not permit such tankers under its flag to trade unless the appropriate certificate has been issued.

(3) Certificates issued under the authority of a Contracting Government shall be accepted by the other Contracting Governments for all purposes covered by the present Convention. They shall be regarded by the other Contracting Governments as having the same force as certificates issued by them.

(4) If a Contracting Government has clear grounds for believing that a tanker required under paragraph (1) of this Article to be constructed in accordance with Annex [C] entering ports in its territory or using off-shore terminals under its control does not in fact comply with Annex [C], such Contracting Government may request consultation with the Government with which the tanker is registered. If, after such consulation or otherwise, the Contracting Government is satisfied that the tanker does not comply with Annex [C], such Contracting Government may for this reason deny such a tanker access to ports in its territorial waters or to off-shore terminals under its control until such time as the Contracting Government is satisfied that the tanker does comply.

ANNEX [C]

REQUIREMENTS RELATING TO TANK ARRANGEMENTS AND TO THE LIMITATION OF TANK SIZE

Assumed Extent of Damage

In the following paragraphs three dimensions of the extent of damage of a parallel piped due to both collision and stranding are assumed. In the case of stranding, two conditions are set forth to be applied individually to the stated portions of ths ship. These values represent the maximum assumed damage in such accidents and are to be used to determine by trial at all conceivable location the worst combination of compartments which would be breached by such an accident.

Collision

Longitudinal extent (l_c): $\frac{1}{3}L^{2/3}$ or 14.5m, whichever is less

Transverse extent (t_c) inboard from the ship's side at right angles to the centreline at the level of the load line: $\frac{B}{5}$ or 11.5m, whichever is less

Vertical extent (V_c): from the base line upwards without limit

Symbols

	For 0.3L from the forward perpendicular of ship	Any other part of the ship
Longitudinal extent (l_s):	$\frac{L}{10}$	5m
Transverse extent (t_s):	$\frac{B}{6}$ or 10.m, whichever is less	5m
Vertical extent (v_s) from the base line:	$\frac{B}{15}$ or 6m, whichever is less, for any part of the ship	

Where: L, B in metres and perpendicular are as defined in Regulation 3 of the International Convention on Load Lines, 1966.

HYPOTHETICAL OIL OUTFLOW FROM TANKS ASSUMED TO BE BREACHED AS A RESULT OF THE ACCIDENT

The hypothetical oil outflow in the case of collision (O_c) and stranding (O_s) should be calculated by the following formulae with respect to compartments breached by each assumed location of damage as defined in Section 1.

Collision

$$O_c = W_i + K_i C_j \qquad (1)$$

Stranding

$$O_s = \frac{1}{3} (Z_i W_i + Z_i C_j) \qquad (2)$$

Where:

W_i = volume of a wing tank in m^3 breached by the damage assumed in Section 1; W_i for a clean ballast tank may be taken equal to zero,

C_i = volume of a centre tank in m^3 breached by the damage assumed in Section 1; C_i for a clean ballast tank may be taken equal to zero,

$K_i = 1 - \frac{b_i}{t_c}$; when b_i is equal to or greater than t_c, K_i should be taken equal to zero,

$Z_i = 1 - \frac{h_i}{v_s}$; when h_i is equal to or greater than v_s, Z_i should be taken equal to zero,

h_i = width of wing tank in m under consideration,

h_i = minimum depth of the double bottom in m under consideration; where no double bottom is fitted, h_i should be taken equal to zero

wing tank = any tank adjacent to the side shell plating,

centre tank = any tank inboard a longitudinal bulkhead.

In a void space or clean water ballast tank of a length less than l_c as defined in first section is located between wing oil tanks, V_j in formula (1) may be calculated on the basis of value V_j being the actual volume of one such tank (where they are of equal capacity) or the smaller of the two tanks (if they differ in capacity) adjacent to such space, multiplied by S_i as defined below and taking for all other wing tanks involved in such a collision the value of the actual full volume.

$$S_i = 1 \quad \frac{l_j}{l_c}$$

Where:

l_i = length in m of void space or clean ballast tank under consideration.

(a) Credit should only be given in respect of double bottom tanks which are either empty or carrying clean water when cargo is carried in the tanks above.

(b) Where the double bottom does not extend for the full length and width of the tank involved, the double bottom is considered non-existent and the volume of the tanks above the area of the stranding damage is to be included in formula (2) even if the tank is not considered breached because of the installation of such a partial double bottom.

(c) Suction wells may be neglected in the determination of the value h_i provided such wells are not excessive in area and extend below the tank for a minimum distance and in no case more than half the height of the double bottom. If the depth of such a well exceeds half of the height of the double bottom, h_i should be taken equal to the double bottom height minus the well height.

Piping serving such wells if installed within the double bottom should be fitted with valves or other closing arrangements located at the point of connection to the tank served to prevent oil out flow in the event of damage of the piping during stranding. Such piping should be installed as high from the bottom shell as possible.

In the case of collision damage simultaneously involving four cargo tanks, the value of O_c may be calculated according to the formula

$$O_c = \frac{1}{\eta} \left(Z_i V_i + \dot{V}_i C_i \right) \qquad (3)$$

An Administration may credit as reducing oil outflow in case of stranding, an installed cargo transfer system having an emergency high suction in each cargo oil tank, capable of transferring from a breached tank or tanks to segregated ballast tanks or to available cargo tankage if it can be assured that such tanks will have sufficient ullage. Credit for such a system would be governed by ability to transfer in two hours of operation, oil equal to one-half of the largest of the breached tanks involved and by availability of equivalent receiving capacity in ballast or cargo tanks. The credit should be confined to permitting calculation of O_s according to formula (3). The pipes for such suctions should be installed at least at a height not less than the vertical extent of the stranding damage v_s.

The Administration should supply IMCO with the information concerning the arrangements accepted by it, for circulation to other governments.

LIMITATIONS OF SIZE OF CARGO OIL TANKS

Limitation of hypothetical oil outflow

The hypothetical oil outflow O_c or O_s calculated in accordance with the formulae in Section 2 should not exceed 30,000 m^3.

Limitation of volume of single tank

The volume of a wing tank should not exceed 22,500 m^3.

The volume of a centre tank should not exceed 50,000 m^3.

Limitation of tank length

The length of a tank shall not exceed 10 m or one of the following values, whichever is greater:

(a) where no longitudinal bulkhead is provided:

$$0.1L$$

(b) where a longitudinal bulkhead is provided at the centreline only:

$$0.15L$$

(c) where two or more longitudinal bulkheads are provided:

(i) for wing tanks:

$$0.2L$$

(ii) for centre tanks:

(1) if $\frac{b_i}{B}$ is equal to or greater than $\frac{1}{5}$

$$0.2L$$

(2) if $\frac{b_i}{B}$ is less than $\frac{1}{5}$:

where no centreline longitudinal bulkhead is provided:

$$(0.5 \frac{b_i}{B} + 0.1) L$$

where a centreline longitudinal bulkhead is provided:

$$(0.25 \frac{b_i}{B} + 0.15) L$$

Source: Price, International Activity Regarding Shipboard Oil Pollution Control, 1971 Oil Spills Conf. Proc. 39-41. See note 477 supra.

APPENDIX K

APPENDIX K

SHIPBOARD POLLUTION CONTROL TRAINING PROGRAM

Outline of Subject Coverage

Orientation to the Objectives of the Program
The Program Content and Approaches to the Presentation
History of Pollution Control Activities within the Federal Government
History of Pollution Control Activities within the Shipping Industry
History of Pollution Control Activities at the International Level
Review of Pertinent Domestic Laws and Regulations
Review of Pertinent International Conventions
The Process of Development of Domestic Requirements
The Process of Development of International Requirements
Domestic Agencies, their Jurisdictions and Activities
International Agencies, their Jurisdictions and Activities
Legal and Financial Liabilities of the Officers and Crew
Responsibilities of Vessel Personnel to Management
Responsibilities of the Terminal Operator
Effects of Various Pollutants on Marine Environments
The Complex Relationships Between Pollution and Safety
Refinery Operations related to Crude Processing
Physical and Chemical Aspects of Oil and other Pollutants on and in Water
The Potential for Pollution from Routine Ship Operation
Potential Pollution Problems during Cargo Transfer
Potential Pollution Problems during Bunkering Operations
Operating Practices for Pollution Prevention
Maintenance as a Pollution Control Practice
Tank Cleaning Procedures from the Viewpoint of Pollution Control
Ballast Handling from the Viewpoint of Pollution Control
Shoreside Ballast/Slop Handling Facilities
Bilge Waste Handling Procedures
The Load-on-Top Approach to Crude Carriage
The Tanker Owners Voluntary Agreement on Liability for Oil Pollution (TOVALOP) and Vessel Personnel Responsibilities thereunder
Priority of Actions in Minor Spill Situations
Priority of Actions in Gross Spill Situations
Evaluation of the Seriousness of an Incident
Operation of the Federal Oil Spill Contingency Plan
On-Board Spill Handling Techniques
Over-the-Side Spill Handling Techniques
The Lessons of History on Repeated Spill Causes

Current [illegible] on petroleum development projects
Coordinating Committee on Petroleum Natural Information
Regarding Environment

Source : Hunter, Prevention of Marine Pollution Through Underwater Oil Spills (Coast Guard, 1971.

See note 49 supra.